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2002–2003 Information Technology Plan

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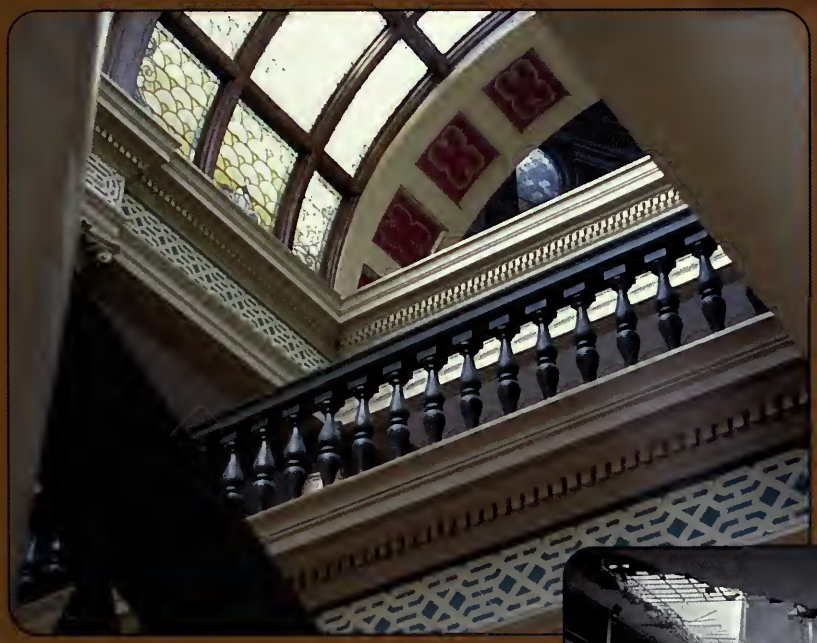

Remaking the Face of Government

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State of Montana
2002–2003 Information Technology Plan

Remaking the Face of Government

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Published by
Information Services Division
Department of Administration
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November 17, 2000

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Acknowledgments

The *2002–2003 Information Technology Plan* could not have been compiled without the help of many individuals in each of the agencies in the State of Montana. We thank them for their cooperation and participation.

Special thanks to the following whose efforts were invaluable during the creation of the Information Technology Plan:

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Architecture & Engineering Division

Tom O'Connell, Joe Norris
For photographs of the capitol renovation.

Q Communications Group

For design and layout

1200 copies of this public document were published at an estimated cost of $8.92 per copy, for a total cost of $10,704 which includes $10,404 for printing and $300 for distribution.

OFFICE OF THE GOVERNOR
STATE OF MONTANA

MARC RACICOT
GOVERNOR

STATE CAPITOL
HELENA, MONTANA 59620-0801

October 2, 2000

Dear Reader:

It has been said that information is the key to commerce in the 21st century. This also is becoming true of government. We increasingly rely on our ability to have accurate, timely and pertinent information available to aide decision-making. Information technology plays a vital role in assisting state employees in performing a substantial share of the work required by our citizens. In this age of the Internet, information technology also enables citizens and business alike to easily access the information they need on a daily basis.

I am pleased to present this *2002-2003 Information Technology Plan*. This plan represents the goals and strategies of state agencies as they strive to constantly improve the use of information technology on behalf of our citizens. The plan includes an overview of information technology projects in each agency as well as several state-wide topics that affect information technology strategies within the State of Montana. The plan also shows many of the coordinated efforts that state agencies have undertaken to streamline their business processes and to provide more, better, and quicker information to their customers.

This publication should be viewed in concert with the new consolidated information technology budget that was contemplated during the last legislative session. These two documents, when considered in unison, paint a clear picture of the State of Montana's plans to harness the power of computers. It is my sincere hope that you gain some new insights into our plans and challenges for the next biennium.

Sincerely,

MARC RACICOT
Governor

TELEPHONE: (406) 444-3111 FAX: (406) 444-5529

Executive Summary

Purpose

The publication of this book is in response to several Montana statutes, especially 2-17-501, MCA that establishes, "...the director of the Department of Administration, in cooperation with state agencies, shall establish policies and a statewide plan for the operation and development of data processing for state government..." Beyond satisfying the statute, this plan serves as a valuable tool to state legislators, agencies, and citizens, enabling them to understand the strategies, goals, and direction of the State of Montana and its agencies.

This book, in conjunction with the Governor's Executive Budget, is also intended to meet the requirements for presenting IT plans, budgets and other IT planning information to the 57th Legislature as required by House Bill 0002 in the last legislative session.

Introduction

The era of the Internet is upon us—in business—in our personal lives—and, as this plan describes—in our government. Governor Racicot, in a letter challenging agency heads to endorse a new vision for delivering information and services to citizens, made the following statement:

> *"The way we conduct business in State Government and interact with citizens is changing rapidly with the expanded use of technology within our agencies. During the past several years, a growing number of citizens and businesses have come to expect access to services through electronic means. Clearly, the advent and maturation of the Internet is transforming our economic and social expecta tions. As the people responsible for delivering services to Montana citizens, we must also transform the way our governmental systems operate to meet these new expectations."*

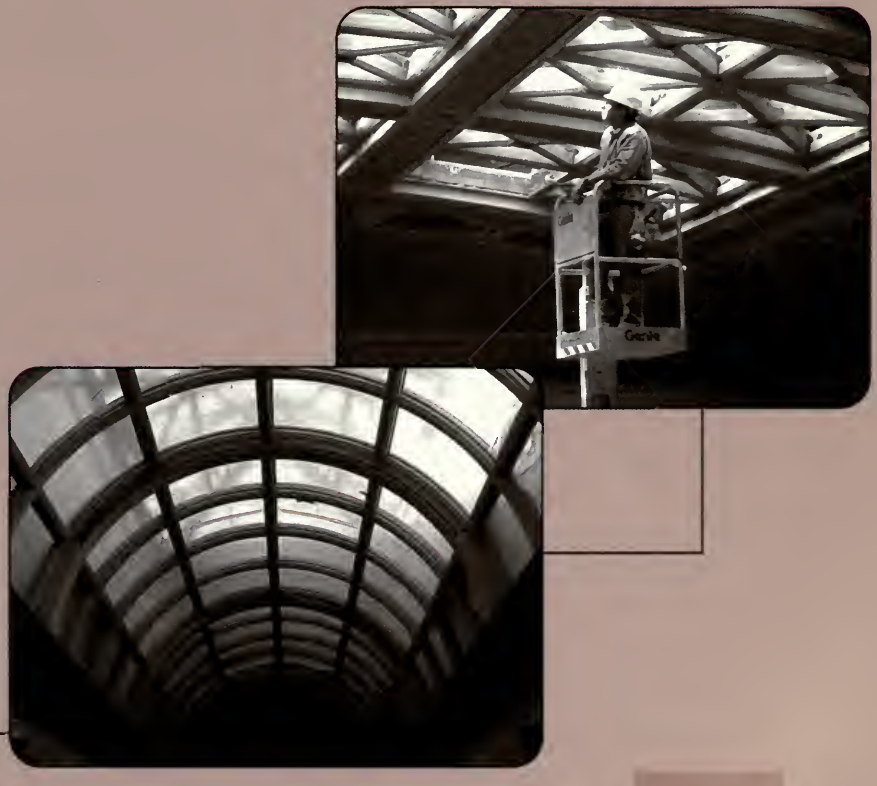
The vision for electronic government in State government comes from the highest-level policy makers in the Executive, Legislative, and Judicial branches. They adopted the following vision statement:

> *"Montana's electronic government initiative will make State government more accessible and responsive to the citizens, business, and other government entities through direct, electronic access to the full range of government information and services."*

The creation of this vision is a vital first step in empowering Montana to participate in and enjoy the benefits of this fundamental transition that we are watching unfold. The detailed plans described in this document describe the more detailed strategies within each agency.

The theme of the *2002–2003 Information Technology Plan* is "Remaking the Face of Government." This theme underscores the fundamental shift that government is undergoing in reshaping the way in which services are provided. Whether service to citizens, or conducting the business of government with the private sector or other governments, the way in which the State will provide services and conduct business is changing—and changing dramatically. This edition of the plan documents these changes. Throughout this plan are pictures of the Capitol building renovation, which show visible changes to our state government. These pictures serve to underscore the plan's theme: Remaking the Face of Government. Although less visible than changes to the Capitol, changes in Information Technology at the State of Montana certainly have been no less dramatic. This edition of the plan documents these changes.

Statewide IT Overview



Statewide IT Overview

BASIC PRINCIPLES

A number of basic principles have evolved that guide the State in the deployment of information technology. These basic principles are described below.

- **Enterprise View**
  It is a goal of the State of Montana to promote and maintain an enterprise philosophy, whereas the State thinks and acts as one large entity instead of as individual agencies. Statewide support for this philosophy has grown at a steady pace over the past several years. This philosophy strongly influences all aspects of managing the information technology infrastructure, including planning, deployment, policies, and acquisitions of information technology.

  ITAC has adopted the following definition of the enterprise:
  "The enterprise is all agencies of the State, including the University System, and participating local government and educational entities, working collaboratively to use, share, and leverage, to the greatest extent possible, the investments made in information technology (IT). To this end, agencies of the State, and participating entities, share systems and networks, use standard software and hardware and train employees in common techniques."

- **Aggressive Use of IT**
  Information Technology is a very effective tool in helping to streamline processes and to carry out the strategies of state government.

  A policy adopted by ITAC regarding this principle, in part, states:
  "The Information Technology Advisory Council (ITAC) advocates a proactive and aggressive attitude regarding the deployment and use of IT in the delivery of state services."

  The complete text of this policy entitled "Aggressive Use of Information Technology to Provide Citizen Access to Information and State Services" can be found at the State's web site located at **http://state.mt.us/isd/policies/Enterprs/ituse.htm**.

  For the next several biennia, the primary focus will be on the electronic delivery of services and information. To that end, an electronic government vision statement was developed, with accompanying guiding principles, goals and objectives. Montana's electronic government vision statement is:

"Montana's electronic government initiative will make State government more accessible and responsive to the citizens, business, and other government entities through direct, electronic access to the full range of government information and services."

The complete text of the vision statement is provided in Section 3.

- **Strong Governance Function**
  Montana has evolved a strong governance structure for information technology. The State's IT governance groups advise ISD on the appropriate strategies and services to be provided by the division. A number of executive and management councils have been established to advise ISD. A complete description of each council is provided in Section 6.

- **Cost Effective Use of IT Resources**
  Information technology resource acquisitions have become critical components of an agencies overall strategy for fulfilling agency program objectives. In addition, the cost of IT resources is becoming a greater proportion of the total program budget as IT is deployed on an ever increasing scale. In general, these factors have resulted in greater analysis and oversight of IT expenditures to ensure the most cost effective technology is being chosen The full range of financial and accounting concepts and practices are increasingly being used in conjunction with IT resource acquisition to ensure the most effective expenditure of limited budgets. Examples include cost/benefits analyses and life cycle approaches to IT equipment replacement.

- **Policies & Standards Based Enterprise**
  Montana's IT infrastructure is managed under an umbrella of policies and standards that reflect the policy and technical decisions made by the various governance groups that have been established to advise ISD. All policies and standards are developed in cooperation with the appropriate governance council.

GOALS & STRATEGIES

The State has developed a number of IT goals and strategies in support of the basic principles described above.

- **Enterprise View**
  Many enterprise initiatives have been enacted and deployed by the State, and more initiatives are underway. Some of the enterprise initiatives deployed include enterprise e-mail (Microsoft Exchange/Outlook), a desktop computer software suite (Microsoft), network operating system (Novell), expansion of the State's network (SummitNet) and database (Oracle). These initiatives continue to be deployed in the form of expanded use throughout State agencies and upgrades to software as vendor products are revised.

The State has begun an effort to deploy a self-funded portal (State website) that will be available for use by all agencies.

- **Aggressive Use of IT**
  For the 2002-2003 biennium, the State's primary focus will be on e-government. ITAC recommendations include: (1) State agencies aggressively pursue e-government strategies, including delivery of direct services as well as the delivery of information and (2) agencies aggressively pursue e-commerce strategies, to include identification of alternate revenue sources to recover costs and enhance revenue.

- **Key Initiatives.**
  Electronic Commerce. A major emphasis on electronic commerce, or the electronic delivery of information and services, will be a key strategy for conducting the business of government and serving citizen needs during the upcoming biennia. The State is moving aggressively forward in this area in order to be in a position to deliver government services electronically. Most importantly, the State will provide a single Internet site to go to receive services, in which links will be provided to all other services. Also, an Internet Technology Services Bureau was created within the Information Services Division which will promote and provide electronic delivery of services to our citizens and to private businesses. Finally, the State continues to regularly update and upgrade the IT infrastructure accordingly to assure sufficient capacity and data integrity.

  SummitNet Expansion. Expansion of the State's data network will continue in the next biennium in support of increased agency demands for network capacity.

  Implementation Projects. During the 2000–2001 biennium the State has been quite active with a number of technology projects, and has implemented several IT initiatives with far-reaching implications. These implementations include a centralized imaging, document management, and workflow service.

- **Cost Effective Use of IT Resources**
  A combination of methods are used to ensure the most cost effective use of IT resources, including:

  Competitive Procurement. Virtually all IT acquisitions are done using competitive procurement. The goal of the State in all IT procurements will be to obtain the best value for products and services. Numerous formal procurement vehicles exist that allow the State to get the lowest possible pricing. These vehicles, which include a Term Contract, a Request for Proposal, and an Invitation for Bid, typically attract a large number of bidders. The State regularly issues competitive bids for hardware, software, and services. A sample of the major purchasing agreements

reached during the 2000-2001 biennium include personal computers and servers, IT consulting services (Oracle programming, Internet services, E-commerce services, e.g.), and virus scanning software. The State also seeks the best price through cooperative purchasing arrangements, whereas the State essentially ìrides the coattailsî of some other state of local government entity's agreement. For example, in September 2000 the State signed a contract amendment with Compaq Computer Corporation, whereas the State nearly doubled its discount rate when it became part of a large volume purchasing agreement for computing equipment (the Western States Contracting Alliance, or WSCA).

Volume Purchases for Best Prices. Volume purchases of IT resources will continue whenever it can be shown to result in better prices.

Exclusive term contracts for hardware and services, whereas the agencies must purchase a particular product or service from a selected vendor allow for better buying power. For example, the personal computer term contract is exclusive. When vendors know that they are guaranteed a certain amount business, they have less risk and therefore lower pricing. Non-exclusive contracts are set up to provide better selection to the agencies. For example, agencies to not have to turn to the MIS Services term contract for consulting services, but the MIS Services vendors are available for immediate use without the administrative effort required to undertake the procurement process (RFP, etc.).

The State has also entered may site license agreements for volume purchases of major standard software. A site license agreement means software is provided for every State user. Again, very favorable pricing is achieved with these agreements because of the sheer volume of licenses with one vendor. Examples of site license agreements include Microsoft desktop suite (Windows, Word, Excel, etc.), Novell NetWare, Sybari and McAfee (virus scanning).

Maximize Useful Life of IT Equipment. The State will continue to employ proven methods and strategies in order to obtain the maximum amount of useful life from its computing equipment. One primary method employed by the State to maximize the useful life of computing equipment is a life-cycle approach to IT assets. In order to best utilize personal computers, the State has adopted a four-year replacement cycle. Every year about one- quarter of the PCs are replaced, so that everyone has a new PC at least every four years. The State adopted the four-year cycle after undergoing an extensive evaluation on the useful life of a PC. This evaluation relied heavily on studies by independent research experts such as Gartner Group and META Group, which validated the PC manufacturer's recommendation to replace personal computers a minimum of every four years. The State also strives to maximize the useful life of other computing equipment such as printers using the replacement cycle philosophy.

- **Standardization**
  ISD, in conjunction with governance groups such as ITMC and ITAC, strives to promote and maintain standards for telecommunications and computing equipment, software, and services. New enterprise standards will be developed as ISD and agencies identify additional opportunities to better manage the IT infrastructure through standardized use of products.

ENTERPRISE-WIDE POLICIES

The State of Montana has developed several enterprise-wide information technology policies. A short description of each policy is provided below. The complete text of each policy can be found on the State's web site at **http://www.state.mt.us/isd/policies/policies.htm**

- **Internet Services**
  The State provided Internet, intranet and related services are to be used for: the conduct of state and local government business and delivery of government services; transmitting and sharing of information among governmental, research, and educational organizations; supporting open research and education in and between national and international research and instructional institutions; communicating and exchanging professional information; encouraging debate of issues in a specific field of expertise; applying for or administering grants or contracts; announcing requests for proposals and bids; announcing new services for use in research or instruction; and conducting other appropriate State business.

  The State provided Internet, intranet and related services are not to be used for "for-profit" or "non-profit" activities or for extensive use for private, recreational, or personal activities.

- **Domain Name System**
  It is the responsibility of the Department of Administration's Information Services Division to be descriptive and consistent with all subdomain names under the state.mt.us primary domain. The State of Montana follows the US Domain naming standards. The Domain Name Services naming convention for a state agency is <agency acronym>.state.mt.us (e.g. doa.state.mt.us). When assigning new IP subdomain names, this naming convention will be used.

- **LAN Backup and Archiving Plan**
  Each agency must have a written backup plan including a backup schedule, backup process and a list of mission critical applications. Agencies should consider their current electronic archiving process (the storing of files for future retrieval, not the process of sending documents to the State Archives) while developing their backup plan. The backup plan must be reviewed annually and periodically tested by the agency network administrator.

- **Network Resources Naming Standards**
  It is important that network names be standard and consistent, and have naming standards so information being created will be standardized and consistent from agency to agency.
  Pre-defined three letter acronyms will be used to identify agencies and to remain consistent with other automated directory services on the state network. These acronyms are to be used in naming objects and other items on the network.

- **SummitNet Acceptable Use**
  SummitNet is to be used for: the conduct of state and local government business and delivery of government services; the support of instruction, learning, training, educational administration, research, and grant procurement; the increased participation of citizen oversight of government affairs; and the promotion of economic development.

  Remote Access: An agency may allow remote access to its computing resources on a case-by-case basis. Access will be granted for benefit of the State of Montana and not for personal benefit or use.

- **E-mail Acceptable Use**
  The State provided electronic mail (e-mail) system is to be used for: the conduct of state and local government business and delivery of government services; transmitting and sharing of information among governmental, research, and educational organizations; communicating and exchanging professional information; and conducting other appropriate State business.

- **PC Replacement Cycle**
  Every personal computer will be replaced with a new computer a minimum of once every four years. At the time of purchase, the new computer must meet the minimum level of technology set by the Department of Administration's Information Services Division (ISD) for new personal computer purchases.

- **Internet/Intranet Security**
  The Department of Administration's Information Services Division (ISD) is responsible for providing security for the Montana state network. This includes access from the state network to the Internet, firewall protection from the Internet to the state network, virus protection, and the detection and reporting of intrusion attempts.

- **Network and File Server Security**
  Physical Access: Only personnel authorized to operate a file server will have access to the physical area where the file server resides.
  Administrative Access: Supervisor level access given to employees must be approved by the Agency Security Officer or the State Security Officer. User ID's with Supervisor level access must

follow state policy regarding passwords.
Audit Log Requirements: The use of Supervisor userIDs must be logged using either an access log or an auditing software package.

- **Transmission Privacy**
  State and federal statutes provide a foundation to guarantee an appropriate level of privacy when electronic communications are used. The scope of this policy is limited to those activities associated with the "transmission" of information using the State's telecommunications network. Transmissions on the State's telecommunications network may only be intercepted (including copying and/or recording) and/or monitored (including viewing and/or listening) when such interception is in the normal course of employment responsibilities, or is regarded as necessary to providing the State's telecommunications services, or is protecting the rights and property of the State of Montana. No telephone conversation may be recorded without the knowledge of all parties to the conversation as provided for in 45-8-213, MCA.

- **SABHRS Application Code**
  The SABHRS application code residing on agency file servers may only be modified by authorized personnel performing authorized actions. The normal method of modifying the application code is through the use of Novell Replication Services (NRS). NRS is set up specifically to distribute modifications from the master application code to the application code residing on agency file servers. It is the responsibility of Agency System Administrators to insure the security of the SABHRS application code residing on agency file servers and the adherence to this policy. Authorization for any modifications must come from the SABHRS Support Bureau of the Information Services Division of the Department of Administration. Any unauthorized activity must be reported to the SABHRS Support Bureau immediately.

- **Usernames and Passwords**
  All agencies are responsible for authorizing access to their information resources by designating certain persons as users and authorizing such persons to access these resources in the manner necessary for performing their duties.

  - Usernames
    A user must be identified to the network with a unique ACF2 username assigned by the Department of Administration, and must have a password associated with it. A username is to be suspended when the individual user no longer needs access to a computer system or terminates employment with the agency. The security officer for the computer system involved must be notified by agency management to suspend the username.

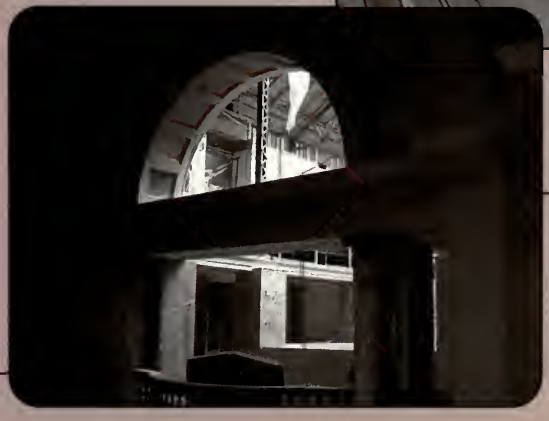
- Passwords
  Passwords will be at least six characters long and contain at least one numeric and one alphabetic character, be changed at least every 60 days, and will not be reused for at least four cycles.

- **Access Rights**
  If a user changes work positions in an agency, their access rights must be reviewed and changed to match the new job position. Agencies may restrict or extend computing privileges and access to their information resources (except in cases of specific federal or state statute.) Access to network resources (programs, data, printers, etc.) is determined by the rights or privilege assigned to each username. Agencies may allow individuals, other than state employees and contractors, access to information for which the agencies are responsible, so long as such access does not violate any license or contractual agreement; state policy or any federal, state, county or local law or ordinance.

- **Voice Menu Service**
  The Voice Menu service is to be used for:
  - the conduct of state business and delivery of government services; and
  - communicating and exchanging professional information.

  All State policies on the use of the telecommunications network apply to the use of Voice Menu services.

Information Technology Enterprise Topic



Information Technology Enterprise Topics

There are many information technology projects in progress or planned for future implementation in the State of Montana. These initiatives cover a wide range of topics from electronic government to specific technology initiatives within the State such as imaging and desktop software.

Throughout the following pages, the reader will receive a brief examination of current information technology issues being dealt with and gain information about the State's status with respect to each project. While the Information Services Division (ISD) of the Department of Administration is responsible for coordinating most of the topics in this section, some of the topics are being coordinated by other agencies; thus, representing the cross-agency efforts underway in the State's enterprise IT initiatives.

E-Government Vision Statement

VISION STATEMENT

"Montana's electronic government initiative will make State government more accessible and responsive to the citizens, business, and other government entities through direct, electronic access to the full range of government information and services."

GUIDING PRINCIPLES

Government Exists to Serve the Public

Government's primary mission is to serve the public, and guide its actions by the following precepts:

- Citizens are the ultimate reason for government and its services.
- Government must always be accountable to the citizens.
- A commitment to efficient and effective public services underlies every activity of government.

Widespread Access to Government Services

The use of technology enables citizen access to government services and information regardless of time of day, location, or disability. Technology allows state employees to have timely access to accurate information that they need to serve the public.

A Single Face of Government

Citizens should be able to interact with government directly through the use of technology. Government services should be delivered on citizens' terms—irrespective of state agency boundaries. Citizens should not have to understand the structure of government to obtain information or services they require. Ideally, information should be collected once and used many times.

Government Information is a Valuable Resource

Information and information resources residing in the various agencies of state government are strategic assets, belonging to the citizens of Montana, which must be managed as valuable resources.

Aggressive but Appropriate Use of Information Technology
Information technology facilitates and enables superior public service, but it is not an end in itself. Information technology should be deployed aggressively to provide information and services but only when it can be shown to provide better service to the citizens of Montana and be cost effective.

Balancing the Right to Privacy and the Public's Right to Know
Government has an obligation to carefully balance the constitutional requirements to protect the privacy of its citizens and the public's right to know.

- Montana's constitution guarantees and ensures that all citizens shall have a right to privacy.
- Montana's constitution also guarantees and ensures the public's right to know.

Public/Private Sector Cooperation
Making the best use of the specialized expertise available in both the public and private sectors will allow state agencies to focus on their core missions and goals. Establishing strong, trusted partnerships between the two sectors will help the state manage technology in the most efficient and cost-effective manner possible.

Intra- and Inter-Governmental Cooperation
The State should foster cooperative agreements between the branches of State government, with

GOALS & OBJECTIVES

Goal 1—Citizen Driven Provision of Services
Montana state government's acquisition, use, and management of information resources will be driven by citizen needs.

Objectives

1. Processes will exist to identify and categorize end-user needs for government information.
2. Simple, comprehensive user interfaces will be available for state-provided information and services.
3. Accurate and timely state documents, data, and services will be available and linked electronically.

Goal 2—Seamless Government Services

Montana state government will deliver seamless, integrated government services to citizens through coordinated, statewide information resources.

Objectives

1. State, local government, and private information resources will be interoperable, sharing and coordinating information whenever possible.
2. State government services will be delivered directly to the public via a single point of entry, with information organization and indexing designed to provide seamless searching across agency boundaries.
3. Information technology will be aligned with business processes, irrespective of organizational boundaries.
4. Citizens will have access to online government services at times and locations that citizens select, taking into account special needs and social, economic, and ethnic considerations.

Goal 3—Appropriate Deployment of Information Technology

Montana state government will enhance the performance of its agencies' mandates, missions, and core competencies through appropriate application of information technology resources.

Objectives

1. The focus will be on the government services, rather than on the technology used to provide the services.
2. The primary emphasis in choice of technology will be that which enables the greatest number of citizens to obtain access to government information and services.
3. There will be appropriate application of technology through the adoption and application of information resources standards and guidelines.
4. When systems are replaced, business processes will be re-engineered to provide the information and services electronically to the maximum extent possible.
5. Electronic commerce technologies will be used to deploy services to citizens, conduct business with business partners and perform internal government operations. A full range of electronic payment options will be provided.

Goal 4—Partnerships and Promotion

The State will maximize deployment of electronic government initiatives by partnerships with business and other government entities and promotion of the vision to citizens, business partners, and State program managers.

Objectives

1. The State will explore creative funding arrangements including partnerships with local, other state, and federal agencies and the private sector.

2. The State will aggressively promote the benefits of electronic government through educational, marketing and outreach initiatives.

Goal 5—Privacy, Security and Historical Integrity

Montana state government will ensure the privacy, security, and historical integrity of the information and information resources entrusted to government by the citizens of Montana.

Objectives

1. Data will be collected and used appropriately and securely to satisfy the constitutional requirements to ensure the privacy of information and the public's right to know.

2. Appropriate security and authentication will be in place for information and services provided by the state.

3. The dedication to and practice of Records Management Accepted Standards will ensure the long-term viability of electronic records.

E-Government Strategic Plan

Montana is transforming the relationship between citizens and state government with a new model of government. The objective is to put citizens in charge of their relationship with government by providing unprecedented access to government information and services through a secure Internet connection.

Citizens reasonably expect that online interactions with government will parallel consumer experiences offered by the private sector on the Internet. Montana has launched its electronic government initiative to meet and exceed these expectations with Internet accessible services, interactions, and transactions that are convenient, secure, easy to use, and responsive to the citizen's needs.

Montana is investigating electronic commerce (e-commerce) and digital technologies that are transforming the consumer experience in the private sector. These investigations will lead to an understanding of the tools the State will need to utilize in order to provide citizens with the ability to do things such as register their vehicles, pay their worker's compensation premiums, file their business taxes, and apply for all manner of licenses in one single session over the Internet.

Through secure electronic links with other governmental entities, Montana will eventually provide a full spectrum of government services to customer's, organized in a way that is personalized to a customer's needs.

Personalizing Government

Electronic government changes the focus from multiple points of contact with multiple government agencies to a single point of contact that is organized around the life events of citizens and businesses.

Multiple state agencies, legislative and judicial branches, even selected parts of federal and local government can all be virtually coalesced online into a single enterprise dedicated to delivering services to citizens in the most convenient manner possible.

Electronic government creates an experience that makes sense to the citizen—it is intuitively understandable, with a uniform look and feel, regardless of the entity with which the citizen is dealing.

Electronic government, through its e-services, improves and strengthens relationships between citizens and their government. Secure and controlled access to timely, accurate, and authoritative public records, e-mail, and other networked services provide greater opportunity for citizens to access and interact with all levels of government.

From their homes or offices in Libby, Miles City, Wisdom, or Plentywood, citizens will be able to do as much online as the few with direct physical access to state offices, the legislature, and city halls were able to do only a few years previous. Streamlined electronic transactions, which are intuitively understood and easy to use, increase public confidence in government's ability to function efficiently. Mechanisms for collecting citizen feedback, such as including places for user comments on electronic forms and collecting and analyzing metrics from a helpdesk, assist states in responding to the public's needs and priorities.

Mining Costs Out of Routine Processes

Taxpayers may realize the most important benefits of electronic government through the transformation of government operations—making them more cost effective and responsive in a rapidly changing world. Electronic government holds the promise of bringing the efficiencies of the Internet's .com economy to ".gov" world.

Industry observers have noted the impact of the Internet over the next year is often overestimated, while its impact over the next five to 10 years is profoundly underestimated. Among those observers is Alan Greenspan, chair of the Federal Reserve Board, who concluded, "The newest innovations... have begun to alter the manner in which we do business and create value, often in ways not readily foreseeable even five years ago."

The government's ".com" environment

The public sector is deliberate in its decision making, and must consider factors beyond those that shape strategy and business decisions in the private sector.

Government cannot choose its customers. Its services must be available to everyone within its borders, requiring (in many cases) a hybrid approach to service delivery. Despite growing PC and Internet penetration rates that exceed benchmarks for qualifying as mass media, public agencies may need to maintain conventional service delivery structures to meet their legislative mandates.

Unlike some prominent .com enterprises, government cannot justify huge investments (and attendant operating losses) in pursuit of greater market share. The market for government services is fixed, and public accountability processes do not look favorably on speculative investments.

The challenge and opportunity

The challenge of putting government services online is significant, but it brings with it the opportunity to meet the public's expectation of cheaper, faster, better government services through the use of digital technologies. In the coming years, Montana's political leaders will need to embrace electronic government as a priority in re-making public institutions, with a view to ensuring their responsiveness and relevance in the new century.

Learning from the best of the private sector

The private sector has demonstrated that service delivery costs can be slashed through the strategic use of technology. According to the Organization for Economic Co-operation and Development (OECD),[1] distribution costs are significantly reduced for electronically delivered products such as financial services, software, and travel.

For the airline industry, costs have been reduced from $8 to $1 resulting in savings of 87 percent. In the banking industry, costs have been reduced from $1.08 to $0.13, a savings of 89 percent. Using the Internet for electronic bill payment reduces costs from 71percent to 67 percent, and for term life insurance policies the drop is from $400 to $700 for the traditional methods down to $200 to $350 online, a savings of 50 percent. Finally, the OECD reports, for software the drop is from $15 to a range of 20 to 50 cents for the online process. This results in savings of 97 to 99 percent.

Similar cost savings have been recognized in the public sector. In a 1999 white paper entitled "The Quest for Electronic Government: A Defining Vision," the Institute for Electronic Government states that, "Depending upon the service, the population required to use that service, and other variables, early studies indicate governments are saving up to 70 percent by moving services online compared to the cost of providing the same services over the counter."[2]

Cost savings in other states

The experience of other states is also instructive: the State of Alaska's vehicle registration process used to cost $7.75 for a face-to-face renewal. Now those same transactions cost only 91 cents using the new WebMart online renewal system.[3] The State of Arizona is realizing similar efficiencies with its award-winning Internet-based vehicle licensing application.

In another variation on e-commerce applications in the public sector, GeorgiaNet, a public authority established by the state of Georgia, has structured cost incentives into its online service offerings. By absorbing credit card fees and making the cost of service cheaper online, GeorgiaNet is driving up usage and adoption. The result of moving volumes of routine transactions to the Internet is that staffers have more time to work on the exceptional cases, and deal with the growing demand for public services cost effectively- without expanding the brick and mortar infrastructure.

[1] *The Economic and Social Impacts of Electronic Commerce: Preliminary Findings and Research Agenda, Executive Summary, pg. 14. The Organization for Economic Co-operation and Development.*

[2] *The Quest for Electronic Government: A Defining Vision, by Janet Caldow. Institute for Electronic Government IBM Corporation, July 1999*

[3] *Electronic Commerce: A Blueprint for the States, The Center for Digital Government, pg. 14, November 1999.*

A long-term commitment to doing government business online

While the cost savings listed above are impressive, it is important to remember that they are associated with specific portions or processes of an overall project, and the rate of savings depends upon how quickly the new services are adopted. As such, cost savings cannot be projected across an entire project or budget unit. Additionally, realization of the cost savings will be made over time since initial savings will be offset by the start-up costs.

Ultimately, cost savings are based on sound business practices - the result of the purposeful transformation of the way work gets done. This requires a long-term commitment to re-developing government business practices around the Internet. Sustainable implementation of e-commerce applications will be brought about by improving the public's experience with government and by demonstrating the positive cost-to-benefit relationship of changing the way business is done.

More time for everyone

Electronic government benefits everyone, even those citizens who are unable, or choose not to "go electronic." By serving growing numbers of people over the Internet, Montana can provide the remainder with shorter lines at the traditional counter or shorter telephone queues at agency call centers.

Electronic government holds the promise of automating volumes of routine transactions (broadly defined to include applications, filings, and information requests) while focusing public employees on those interactions that require individualized attention. Not only does this allow government to be more efficient, it allows government to be more attentive to the individual citizen—both online and offline.

Scope

Over the years, legislative officials have created the Information Services Division (ISD) and delegated to it the stewardship of the state's IT resources and, by extension, electronic government. Consistent with this directive, the electronic government initiative will focus on new ways to realize internal efficiencies within its own operations and provide services and information to citizens and businesses.

Electronic government will be constructed in several phases. Montana will progressively deliver services and/or information from all arenas of state government, including the legislative, judicial, and executive branches, both large and small agencies, and all levels of the educational system. While the timeframe for these changes is as of yet unclear, the need for innovative change within government stands before us nonetheless.

In time, intergovernmental agreements will allow the inclusion of appropriate services from other governments such as federal and local agencies. The centrally organized delivery of many diverse services through the state's Internet portal will reach a critical mass, and the resulting single face of government promises to be among the most effective routes for conducting business on the Internet.

Electronic government will also take a comprehensive approach to its scope of technologies. While the initial focus of the early phase will be on the desktop personal computer (PC), it is not likely to remain there for long. *US News and World Report,* in an online article, predicts the birth of a new, post-PC age in the United States:

"An incredible wave of new devices, including WAP (wireless application protocol) phones is beginning to hit the U.S. market. The products represent a new generation of wireless services, one that combines mobile telephony with the Internet and has the potential to change the very way Americans communicate..."

In short, computer makers, phone manufacturers, telecom providers and Internet companies are all rushing into the anytime, anywhere fray. Dataquest estimates that the sale of mobile Internet devices will increase from 685,000 this year to 19.2 million in 2003... Big Blue foresees 1 trillion smart devices connected to 1 billion users around the world in the not-too-distant future as part of what it calls 'pervasive computing'.[4]

As these new modes of information delivery are developed by industry and accepted by the public, Montana will incorporate them into the delivery of electronic government services.

[4] *Moving Beyond the PC: Thanks to Finland, surfing the Net will be easier than ever. By William J. Holsteing in U.S. News Online, 12/13/99.*

STRATEGIC PLANNING SESSION

In February 2000, ISD organized an e-government strategic planning session for department directors, ITAC members, and legislators. Work areas were defined and timeframes were established for research and other work. Below is a synopsis of the items under investigation.

Portals

June 30, 2000 — Research customer expectations, including:

- Customer service expectations
- Who are our customers?
- What do customers want?
- What image should Montana project?
- Access?

June 30, 2000 — Develop an implementation plan for the new portal.

Nov. 1, 2000 — Design, develop and implement new portal

Funding

May 1, 2000 — Describe the bonding option including implications and merits of the concept

June 1, 2000 — Advertising–research and analysis

Benefits-based funding option–research and analysis

Innovation fund–research and analysis

The following issues were discussed:

- Whatever funding strategies are developed, there must be support from the Governor's Office for funding.
- Benefits-based procurement is where a vendor takes a percentage of the savings increment, e.g. California model.
- A state Internet access fee is currently not legal under federal law.
- User fees would be tied to specific online applications and assessed as part of the fee related to the transaction.

Privacy and Security

July 1, 2000	Adopt privacy policies
Sept. 1, 2000	Marketing/Education plan
Dec. 31, 2000	Electronic document management
	Data sharing between agencies and governments
	Develop proposed standards, including policies regarding sale of data
Oct. 1, 2000	Levels of security
	Develop options/recommendations
Aug. 1, 2000	Independent verification of security implementation
July 1, 2000	Update on access/privacy strategic plan

Electronic Payments

March 20, 2000	Build a standard credit card acceptance application for the enterprise, including a SABHRS interface
May 30, 2000	Develop an understanding of and prioritize use of all other payment methods, including a SABHRS interface
June 30, 2000	Research legal/policy impediments to use of any of the methods, e.g. "merchant fee", benefit/cost, risk (Refer to One-Stop as an example)
June 30, 2000	Collateral concerns to be addressed with further research as needed; uniform digital signature law; electronic records audit ability; "electronic vault"
May 1, 2000	Summarize current uses of electronic payments

The Department of Revenue already has authority and standards in place for several of the electronic payment options. Revenue does not have universal authority for use of credit cards.

Applications

2000–2003 Automobile registration
License renewals:

- Automobiles
- Drivers

2001 Expand One-Stop
Business information services: information for start-ups and transfers from out of state; tax information and incentives; incorporation information; etc.

2002 Online application for all business and personal permits and licenses (e.g. hunting and fishing licenses, float permits; small business licenses; environmental licenses; etc.)

2003 Virtual Human Pavilion–all information and processes for welfare, child support, etc.
The following issues were discussed:

- The priority of e-government applications should be based on the following criteria:
  - Opportunity to demonstrate e-government
  - Applications that cross agency lines
  - Applications that have been developed in other states
  - Projects that already are in progress
- Other possible applications include:
  - Online voter registration and online voting. Registration may be available by 2002. Online voting may be available by 2004.
  - Judicial information: online filing (digital signatures), local and state court information and dockets, calendars, fines, dispositions.
- Applications should have a customer centric focus.

Governance Model

The group had enough time to discuss one more issue and chose governance since it had come up during the discussions involving privacy and security. The following issues were discussed:

- Governance of IT is an executive rather than a legislative function.
- There also is a legislative function in the governance of information management. There needs to be collaboration between the executive and the legislative branches.

THE BUSINESS OF GOING DIGITAL

In the public sector there are three elements to the business rationale. The first element is a clearly stated intent of political leadership. Political leadership must lead the charge to transform the face of government to its citizens. Without a single, high-level directive for change, e-government efforts could stagnate in intra-departmental contentions on timeframes and directions.

The second element is utility. What is true for government information is also true for government transactions. Those transactions that involve the highest number of people in the state should be given priority. Vehicle license tabs is clearly the exemplar program in this category.

The third element is value. An important part of any strategic plan is the supporting business and financial strategy. This focuses on the business side of the equation and answers strategic questions such as:

- What does the public want, need and expect? (Electronic government, with its citizen-centric focus, creates a rich opportunity to invite user participation in the requirements definition process.)
- What does the public want, need and expect?
- What do small business owners really want?
- How much are they prepared to pay for the services?
- How much is it going to cost to develop and support the service?
- Who will invest in the venture?
- What do they expect in terms of return on investment?

TOWARD ELECTRONIC GOVERNMENT

The state's successful transition to electronic government is based on careful, coordinated planning to ensure interoperability, ease of use, security, and the wise investment of taxpayer money. To get there, the architects and builders of electronic government must take an approach that treats the state, with all its various components, as a single enterprise. This approach is based on a "build it once" policy in which agencies avoid duplication of effort, adhere to common standards, and utilize a common infrastructure in order to serve the citizens in a seamless way.

Organizing for Success

Montana has an opportunity to build Internet-based applications for citizen, business, and inter-agency use that will enable more effective use of state resources. Without the completion of the initial phases in a tightly woven, interconnected manner, much of the promise of electronic government could be lost. Service delivery would be disjointed and the Internet application development process itself would work against the shared goal of an integrated citizen experience.

The successful transformation to electronic government begins with a shared commitment to business transformation among policy makers, IT leaders and practitioners, and executive sponsors.

Agencies are increasingly developing new business models that take full advantage of the Internet to minimize costs and transform service delivery. The private sector has shown us examples through Amazon.com, Schwab.com, and others where old processes were transformed through a purposeful shift to the Internet as a mainstream service delivery vehicle. As in the private sector, successful transformations in electronic government will rely heavily on user input, ultimately driving prioritization of applications and the direction of application features.

Agencies are being challenged to move beyond the conventional practice of developing independent, stand-alone applications in an uncoordinated fashion and work together as a community of value.

The Community of Value

A community of interest is commonly defined as a group of individuals or entities with a common goal. A community of value also shares a common goal, in this case, electronic government, but it goes further. A community of value is also characterized by a shared investment (economic and/or political) in the outcome and interdependency among the players. In many ways, the Internet is transforming a community of interest within state government into a community of value.

Agencies share a common goal of providing a better citizen experience through more efficient service delivery. Insofar as citizens do not distinguish between or among agencies that perform well and those that do not when forming opinions about what they see as a single entity called government, agencies have a shared interest in the outcome.

Finally, the effectiveness, completeness, efficiency and integrity of the citizen experience rely on agencies coming together around common infrastructure, protocols, and interfaces. Electronic government, done well, creates a mutual, interdependent development environment across the family of agencies.

The state's "community of value" is working together to build electronic government using these critical success factors:

- Executive level commitment
- Communication
- Collaboration
- Allocation of resources
- Statewide approval and support
- Correct sequencing and priorities
- Risk management

Business Strategy, Cost/Benefit Analysis, Process Improvements, and Application Development
A state's typical community of value is composed of those who deliver services, those who provide the infrastructure, and those who authorize how government gets done. Together they share responsibility for guiding the transition to electronic government. Many partners have key roles and responsibilities to monitor electronic government's progress and ensure its success.

The State of Montana's Information Services Division (ISD) is providing the authorizing environment and strategic technology direction for the implementation of electronic government while also coordinating the effort to develop the needed policies. Much of the infrastructure to support e-government is also provided and managed by ISD. The Information Technology Advisory Committee will review ISD plans for e-government activities and will provide agencies the ability to express concerns/interests in the activities.

The Information Services Division (ISD)
ISD, a policy and planning body as well as a service and infrastructure provider, has been given a broad legislative mandate for the stewardship and management of the state's IT resources. Along with developing the plans, technology standards, and policies to enable electronic government and bring it to fruition, ISD also oversees IT acquisitions and projects, will receive progress reports on the electronic government program, and will approve and monitor individual electronic govern-

ment projects as appropriate. ISD will receive recommendations from the Information Technology Advisory Committee for changes to state technical standards and policies underpinning the electronic government project.

Approval and coordination of electronic government initiatives across state agencies will focus on four broad questions:

1. Infrastructure: Does the project meet the state's architectural standards, and does it fit within the state's overall infrastructure?
2. Acquisition: Does the project meet the state's investment policy? What acquisition methodology does the agency plan to use, and why? What is the cost effectiveness/ benefit for the agency and the state?
3. Development: How does the agency plan to develop the application?
4. Implementation: How does the agency plan to deploy the project?

Under legislative mandate, ISD is responsible for the statewide IT plan and its periodic update. This E-Government Plan represents the first phase in the statewide plan's redevelopment around the imperatives of the Internet.

ITAC

ITAC makes recommendations to ISD as well as the Governor's office regarding technical requirements, tool selection, and objectives for e-commerce infrastructure and services, including design of electronic authorization technologies, access control and directory services. ITAC also participates in the development of digital government policy, standards, and guidelines. This group is composed of agency directors.

State Agencies

Agencies develop the key applications that move service delivery to the Internet. They are responsible for business strategy and procedures, cost/benefit analysis, process improvements for the Internet applications, as well as implementing agency-specific components of electronic security architecture. Agencies also have dedicated executive management and technical staff to support and provide critical input on the electronic government effort as they seek to transform the way their organizations do business. Their work on the various committees and workgroups will provide fine-tuning for navigating Montana's move to electronic government.

Current and Envisioned Projects

Several projects are either underway or in the concept stage to innovate how citizens interact with their government in specific business cases:

- The Department of Transportation is currently in the process of modifying existing permit sale systems to increase the public's ability to purchase trucking permits both online and at DoT locations.

- The Department of Revenue has been automating tax collection for a number of years. In the last couple years, the DoR has begun to aggressively provide more automated means to citizens and businesses to submit income tax forms, collect business reporting information (in conjunction with the Department of Labor and Industry), and submit required information to the Federal government.

- The Department of Revenue and the Department of Commerce are jointly working with a variety of state agencies to increase the availability of all state licensing forms from a single source. In the concept stage, is the possibility to allow for completion and submittal of these forms online.

- The Legislative Branch has put forth a large effort to provide legislative information online. Additional efforts on the drawing board for the Legislative Branch are streaming audio of floor sessions or committee meetings and the sale of publications over the Internet.

- One area that has been widely requested in other states, and that is a concept being discussed at the Department of Justice, is providing motor vehicle license renewals and other motor vehicle processes over the Internet.

- The university system is also considering future plans to provide more services on a 24/7 basis. By adding Internet interfaces to school bookstores lines could be reduced and sales to outside sources possibly increased. Allowing parents to pay for their children's schooling over the Internet, could allow parents more choices for payment and possibly provide more detail to parents of the costs they are paying.

Current Budget Efforts

During the 2001 Legislative Session, a budget item will be brought forward that deals with government-wide e-government efforts. A summary of this budget item follows:

Rate Planning Request Description: To efficiently move the State of Montana into the e-government arena and make state services available on the Internet, shared goals and a common infrastructure need to be established. This item deals with many aspects of e-government and creating, managing, and supporting the infrastructure.

E-Government Consulting Services

This request is to hire outside experts to assist the State in moving into e-government. Consulting services will provide strategic direction and recommend implementation plans. They will provide direction in regards to preparing for an Enterprise Directory Service, which is essential for insuring an acceptable foundation for providing e-government services. The consulting services would assist agencies in identifying applications and services that could be provided on the Internet, and give them alternatives on how to accomplish their goals.

> **Supporting Justification:** All authorities (Gartner Group, META Group, Burton Group) emphasize the importance of having a planned approach when moving into a new service area. Planning up front can save numerous dollars, rework, and schedule delays during the implementation phases of e-government.

Discovering Montana (Montana Online)

An important aspect of e-government is to have a single point of access (referred to as a portal). A portal is a common, comprehensive, electronic gateway (or entry point) to government information and services. Discovering Montana is the portal to Montana information and services.

To take full advantage of Internet technology, tools are necessary for analyzing, reporting, and managing Discovering Montana and Internet and bandwidth usage. These tools include items such as a search engine, IP policy management (to prioritize what applications get to use the bandwidth first), usage (number of hits per page), web caching, etc.

An important infrastructure aspect for e-government is to have a common solution, look, and feel, for financial transactions. This service will be provided through Discovering Montana.

> **Supporting Justification:** The on-going support, maintenance and development of Discovering Montana are increasing as it becomes more customer centric and provides e-government services. Management tools are necessary to keep things in proper working condition and to provide measurement for the success of providing services electronically. These tools will assist managers in making the right decisions in regards to information technology for their programs.

Digital Signatures

A digital signature is extra data appended to a message that identifies and authenticates the sender and message data using public-key encryption. A digital signature provides a guarantee that an electronic transaction has been sent by the person that is represented to have sent the message, has not been altered in the process of sending the transaction, and protects the person receiving the message from a sender's claim that the message was never sent in the first place. A digital signature is an electronic equivalent of a written signature.

Supporting Justification: With the creation of electronic documents, electronic mail, and electronic transactions, authentication of a person is often desired or necessary. Digital signatures allow for state employees and the State's customers to 'electronically sign' documents or transactions the same way they usually sign paper documents. Public-key encryption provides as strong of assurances with a digital signature as is present with a written signature.

Statewide Intranet

A state employee intranet would allow for collaboration and sharing of data among state agencies and employees. The intranet would be a network that could only be accessed by authorized state employees. All services would be accessed through a common portal (an internal equivalent of Explore Montana.)

Supporting Justification: Applications that could be offered on the intranet include time sheet entry, travel requests, travel reimbursements, supply orders, approval forms, internal policies, etc. The intranet would replace the corresponding paper processes allowing for more efficiency and less errors. This is for the support of the infrastructure and portal (not the development of the applications.)

Supporting Infrastructure and Efforts

ISD, being the central IT authority in our state government, has been working for years to provide central, standard infrastructure to support the State's computing efforts. This infrastructure will provide us with a "jump-start" on our efforts to provide better services to the citizens of our state. Without our previous efforts, the State would have to spend additional years and many millions of dollars even to begin electronic government efforts.

- Database support services, standards, and hosting provides for those agencies unable to host their own systems, a central location with the expertise necessary to run reliable, computerized systems. With these services and standards in place, the State can be more responsive to citizen needs for electronic government services. And with the industry standard software utilized in this service, differing e-government services will be more compatible with one another: a greater sharing of resources and information can take place.

- A standardized, shared network assures that information can be more readily shared between systems and agencies as well as provides more locations where citizens can interact with their government through means the citizen desires.

- After seven years, ISD has reorganized its internal structure to better reflect current market trends and statewide computer needs. The Internet Technologies Services Bureau is a new bureau dedicated to the development of appropriate Internet technologies throughout the state. This bureau will provide the leadership on e-government initiatives, manage the state's web presence, and develop and manage Intranet applications. Additionally, this bureau will take the lead in communications and marketing services for ISD. This bureau will help reengineer the way ISD and the State provides its services through new technologies.

- The Department of Commerce has been performing market analysis on the creation of a public/private sector "Montana Advanced Technology Coalition". If created, this coalition will work to create new economic opportunities for Montana in high technology fields. One focus currently, is electronic commerce within Montana's businesses in order to better open them up to multi-state and even international business. Montana government efforts will have to be well aware of the coalition efforts so as to not hinder the economic development projects.

- Payments – Additionally, ISD has posted a request for proposals from electronic payment acceptance companies to provide the State with the capability to accept payments via the Internet and other electronic means. This capability will be essential to agencies as they wish to bring business processes online and allow citizens to pay for government services via means acceptable to the citizen.

Future Scenario

In the future, the citizens of Montana would be able to do their business with the government at any time of the day, on any day of the year, from the convenience of any number of private and public locations. If we strive to enable many of the following items, we will be much closer to that envisioned world of e-government.

- Allow electronic creation and submittal of all government forms electronically (city, county, state);
- Allow citizens to pay government fees/fines/dues/taxes/etc—over the Internet;
- Enable citizens to access e-government from numerous locations (home, local library, schools, access kiosks, etc.);
- Increase opportunities for citizens to obtain answers to questions via e-mail, online conferences, FAQ's, etc.;
- Increase voter participation via online voting;
- Make business creation and registration easier by bringing these functions online.

Conclusion

Electronic government is a dynamic environment where the public sector must plan for, and implement, both "sustaining" and "disruptive" technologies. The categories were developed by Harvard Business School professor Clayton Christianson and go to the heart of what he calls the innovator's dilemma.[5] The difference between them is that "sustaining" technologies improve existing processes, as measured by conventional measures, while "disruptive" technologies ignore existing processes in favor of a new generation of service offerings, the performance of which is measured by a new set of metrics that apply to the new ways of doing business.

The Internet propels government to a strategic inflection point, a point beyond which new metrics, new rules, and new expectations apply. On the threshold of a new century, it is reasonable to expect the following trends will solidify into the new metrics of governance:

- The growth of the digital citizenry;
- The expectation of compelling, integrated and simple online experiences with an "always open" government;
- The expectation of a secure online environment and appropriate consumer protections;
- Location independence of people through wireless connections and different sizes and shapes of Internet access devices; and
- Incubation of innovation from within, followed by rapid replication.

The ability to transform service delivery using Internet technologies is among the core competencies of government. A made-in-Montana approach allows the state to deliver the widest possible array of secure, accessible, and convenient services, in formats that are most responsive and cost-effective for Montana's citizens and businesses. E-government is a means to a more perfect end—making Montana's government the most easily accessed state government in the nation.

[5] *Clayton M. Christianson, "The Innovator's Dilemma: When New Technologies Cause Great Firms to Fail", Boston: Harvard Business School Press, 1997.*

IT Governance

Governance is the process by which enterprise-wide policies and priorities are formulated to insure that information technology resources and plans are aligned with the goals and objectives of state government agencies.

The topic of governance has been an ongoing topic for many for both the Information Technology Advisory Council (ITAC) and the legislature. At ITAC's 2000 strategic planning conference, governance was identified as one of the important issues to review. During the 1999 legislative session, this topic received the attention of the Legislature, subsequently becoming a focus of the Legislative Finance Committee study mandated by in HB2. The Legislature expected the study to address their concerns regarding state agencies' investments in and expenditures for information technology hardware, software, and services.

The current governance model is a division level organization for enterprise IT activities (Information Services Division within the Department of Administration) with a statutorily established advisory council (ITAC) comprised primarily of cabinet level members. This model does not effectively incorporate three governance elements recommended by META Group, a national information technology consulting group. These elements are:

- Legislative guiding principles
- Governing authority, including a chief information officer (CIO), and IT agency or high-level office, and governance boards
- Legislative oversight

Governance was a focus of the Information Technology Management Study conducted by the Legislative Finance Committee. Agencies, ITAC, and ISD participated in the study and the results are documented in the Report to the Information Technology Management Study Subcommittee, titled Information Technology Governance in Montana, dated June 7, 2000. http://leg.state.mt.us/reports/fiscal/subcommittees/IT_study/Governance_report.PDF"

The Legislative Finance Committee considered the information presented and, at its June 9 meeting, decided to recommend to the 2001 legislature the following:

- Enactment of "legislative guiding principles" to steer the development of IT resources in Montana state government;

- Creation of a Department of Information Technology, with a director carrying the title and function of Chief Information Officer (CIO). Responsibilities of the CIO and department including the following:
  - developing and maintaining a statewide strategic IT plan;
  - reviewing and approving agency IT plans;
  - establishing statewide policies and standards for IT;
  - evaluating IT budget requests;
  - coordinating the development of shared IT systems and applications; and
  - reporting to the legislature.

- Creation of an Information Technology Board to advise the CIO. The IT board would have representatives from all three branches of state government and include representatives for local and federal government and private industry. The appointing authority would be included in statute.

- Consolidation of related governance statutes into one section of law and would:
  - begin with legislative guiding principles statements;
  - create and assign duties of the Department of Information Technology;
  - rename and assign members and duties of the Information Technology Board; and
  - define the content requirements for agency and statewide IT strategic plans.

Statewide Accounting, Budgeting, and Human Resources System (SABHRS)

The Department of Administration, Information Services Division is responsible for maintaining SABHRS. The SABHRS Support Bureau exists within the Division to carry out this responsibility.

The accounting and human resource components of SABHRS consist of the following nine PeopleSoft modules: General Ledger, Accounts Receivable, Accounts Payable, Asset Management, Purchasing, Human Resources, Benefits Administration, Time and Labor, and Payroll. The budget development component of SABHRS, referred to as MBARS (Montana Budget, Analysis, and Reporting System) is provided by an application developed by Legacy Solutions.

Montana went live with MBARS in August 1998. The Asset Management module was rolled out in October 1998, followed by Human Resources, Payroll, Benefits Administration, and Time and Labor in April 1999. The General Ledger, Accounts Payable, Accounts Receivable, and Purchasing modules went live in July 1999.

The SABHRS Mission Statement is as follows–To support a statewide information system to more effectively manage state resources and serve the citizens of Montana.

Related goals include:

- Position State managers to make the best business decisions for Montana by providingtimely and accurate financial and human resource information.
- Promote efficient and effective business processes by providing systems that reduce data entry time, minimize the possibility of errors occurring and provide optimum access to State employees, officials, vendors, customers, and the public within an appropriately secured environment.
- Position the State of Montana to benefit from future technological advances as applicable to the information management system environment.

Challenges–The SABHRS Support Bureau faces many challenges in its effort to achieve these goals. During the 2000–2001 biennium those challenges have included:

- Addressing flaws in the various applications associated with SABHRS.
- Identifying and correcting data errors.
- Meeting end-user training needs.

- Providing the various user groups with appropriate access to the data for reporting purposes.
- Stabilizing the system architecture.
- Managing the upgrade process.

Initiatives undertaken by the Bureau during this biennium to address these challenges include:

- The application of software vendor provided or State developed fixes to address problems or provide required functionality.
- Meet data access demands by partnering with various State departments and agencies to develop solutions, or by establishing reporting procedures that provide access to powerful reporting tools (PeopleSoft Query/Crystal for example).
- The implementation of newer versions of PeopleSoft Finance and Human Resource modules, Oracle, and Legacy Solutions software.
- The evaluation and implementation of new hardware and software solutions that stabilize the SABHRS environment and promote reliable and efficient system performance.
- Developing and implementing a data archiving and retrieval plan.
- Partnering with the Helena College of Technology to provide users with a SABHRS training program.
- Strengthening Montana's alliance with software vendors and other customers to ensure that the State's interests are represented as application enhancements are planned and implemented and to provide the State with greater insight into future product developments.

The above noted initiatives are of an ongoing nature, and as a result, will continue into the 2002–2003 biennium.

County Government IT Needs Analysis

The Montana Association of Counties (MACo) has determined that it needs clear, current information on the state of Information Technology (IT) among its 56 member counties to enable these counties and MACo as an organization to fully embrace current technology, especially e-government applications. As a significant business partner of county government, it is in the best interest of Montana state government to work closely with counties in this area. To this end, MACo and the Department of Administration, Information Services Division (ISD) have entered into a service agreement for March 6, 2000 through August 31, 2000 to provide staff support to this project.

PROJECT DESCRIPTION

This project will investigate, analyze and document the current state of IT in Montana's Counties and make recommendations where appropriate on where improvements are needed to allow the counties to utilize e-government systems and similar innovations.

Applications that may be investigated include budget and finance, permitting and vehicle registration (and other State sponsored applications.) Infrastructure that will be evaluated include voice, data and video transmission, local network architecture as well as desktop architecture, applications, and technical support services (such as in-house or community-based technical talent).

PROJECT OBJECTIVES

Survey counties to gather comprehensive data on IT capacity (hardware, software, human resource, telecommunications, video, and connectivity infrastructure.)

- Research the state of the art as it applies to local government information technology (voice, data, and video).
- Investigate promising e-government applications in other states.
- Document statutory or regulatory references to e-government.
- Investigate various options on how to embrace new technologies.
- Make recommendations concerning the pro's and con's on how counties might best prepare themselves to take advantage of advanced technologies.
- Research the impacts of state agency initiatives (such as the POINTS system in the Department of Revenue).

The project will conclude upon the submission of a final report to MACo detailing the findings and recommendations of the study. This project will not seek to provide specific solutions nor will it endorse any specific provider of services to counties. The project will not attempt to dictate what specific counties should do nor impose a State of Montana perspective on county government.

IT Infrastructure

SummitNet is the acronym for "State and Universities of Montana Multi-Protocol Network". SummitNet is the state's data communications network across Montana. State agencies, libraries, local governments, K-12 schools, tribal colleges, and universities all have access to SummitNet. SummitNet provides data communication connectivity between all of these organizations statewide.

SummitNet, in it's fairly brief history, has expanded to 89 cities across Montana and is also connected to several other states as well as the United States federal government and Canada. Physically, SummitNet is built around Internet Protocol routers and dedicated data circuits provided by the common carriers of Montana. SummitNet's 475 routers are connected by fiber optic LAN (Local Area Network) connections, 319 56KBPS and 128 T1 (1.544Megabit) circuits. The network serves over 10,000 personal computers in all branches of state government as well as numerous county and city entities.

ISD has expanded the fiber-optic backbone network to serve 24 buildings in the capitol complex. This backbone LAN speed (bandwidth) has been upgraded from 16 million bits/second to 400 million bits per second. It is anticipated that the fiber-optic backbone will provide agencies with a single high-speed LAN capable of meeting LAN connectivity needs for at least 10 years. During the next five years, SummitNet traffic will continue to increase as agencies connect additional personal computers each year to the existing installed base and continue to add new applications as they expand into e-government.

Working with our customers, landlords and vendors, ISD has installed several wireless LAN segments. Wireless technology allows ISD to provide higher speed LAN access to remote buildings (up to a mile), while saving on expensive data communication circuitry. ISD continues to work with local government entities to bring the maximum benefit to the people of Montana. Several joint endeavors have allowed communication facilities, computer hardware and technology to be shared. These agreements provide cost savings and increased benefits to all parties involved.

Future Directions

- Network Growth—SummitNet will continue to expand to meet the needs of state government. The expansion will be in the areas of additional bandwidth to support existing customers and the addition of new locations for supporting new customers. This growth will require additional hardware, and circuits. The state will need to support new e-goverment applications that are being developed for the delivery of vital services by state agencies.

- The new biennium will see the continued deployment and expansion of the high speed digital (ATM) network infrastructure. ISD will continue with the integration of voice, video, and data services. This integration allows the transmission of signals concurrently over the same communication facility.

- Bandwidth on LANs will continue to be increased as high speed (100 Megabits) Ethernet replaces the traditional Token Ring (16 Megabits) architecture.

Capitol Renovation Project

This project was a major remodeling effort on the interior of the State of Montana Capitol Building. After a two-year period of performing a needs assessment with the building stakeholders, and developing the construction design documents, an Invitation for Bid was released to the public on November 2, with a Bid opening on December 10, 1998. The first construction phase began May 17, 1999 after the building occupants relocated to other locations within Helena.

The telecommunications system for the Capitol Building is designed to handle the demands of government today and for the foreseeable future. The cable and connectors that will be used will be able to support gigabit speeds both on the backbone and to the station locations.

The system encompasses a dual riser system from the lower level through the fourth floor with each stacked riser closet supporting half of a floor. The main distribution frame is located on the lower level with raceways to the riser closets on each wing of the building. The main distribution room and riser closets are environmentally controlled with secured access. Adjacent to the main distribution room is the main equipment room for the building. This is a shared resource for all tenants to place computer equipment in an environmentally and electrically secure area.

In general, voice and data applications will be supported with a fiber optic backbone and video applications with a coaxial backbone. Voice and data station cable will universally be category 5 E unshielded copper cable and video station cable will be coaxial cable. A Master Antenna TV (MATV) system was installed, which created an in-house closed video system for the audio and video broadcast of public affairs programming.

Because "gigaspeed" is a relatively new technology, various standards are in development, which may eventually affect the final design. As the physical consequences of these options will have a substantial affect on the final design solution, the contractor was required to demonstrate complete familiarity with the developing standards and associated work practices, including the testing devices and testing standards for this type of high-speed network. Complete testing to the new "gigaspeed" parameters was required within the scope of the requested work.

Imaging

http://www.state.mt.us/isd/planning/it_init/imag_doc/index.htm

Document Management is defined as keeping track of stored documents that have been scanned into a computer file or created using a word processor, spreadsheet, or other application. Imaging is defined as the online storage, retrieval, and management of electronic images of documents. Storing documents as digital images greatly reduces the floor space requirements for storage. The power of an imaging system to manage paper can be appreciated by considering that one 5.25-inch optical disk can store about 320,000 documents, equivalent to the storage capacity of 27 four-drawer filing cabinets.

The Centralized Imaging System provides for capturing, storing, and retrieving documents. The system makes the best use of available resources. It minimizes support costs by sharing resources among agencies, and utilizes the existing State information technology infrastructure. FileNET's Panagon software is used for both Document Management and Imaging.

Capture can be done either through scanning printed material, or capturing electronic documents such as word processing documents, spreadsheets, or graphics. There is a scan operation center at the Records Management Bureau (RMB) where agencies can contract to have documents scanned. Agencies may borrow ISD's scan station on a temporary basis (for initial start-up or overflow work). Most agencies will want to purchase their own equipment and scan documents at their office. Printed document capture is accomplished using FileNET's Panagon Capture software on a PC connected to a scanner. Electronic documents are captured using FileNET's Panagon Capture software through the File Import function. Agencies are responsible for all aspects of capturing their documents.

Capture consists of three steps; Scanning, Indexing, and Committal to the Imaging Server. The capture process can be customized to allow agencies to link index fields to existing database tables. It also allows automation of scanning and indexing by use of bar codes, patch codes, and OCR processes.

Storage of documents is accomplished by creating an image of the captured document on the Centralized Imaging Server. Agencies have secure access to the Centralized Imaging Server. This means agencies can establish different levels of access by type of user and by type of document. ISD is responsible for maintaining the Centralized Imaging Server including backup and disaster recovery of data and 24-hour monitoring.

Retrieval of documents is accomplished through an Internet web page. The web page allows retrieval by any user with Internet access and a web browser. The search page is customized for

each agency to indicate the index fields chosen by the agency. This provides easy and powerful access to images stored on the Centralized Imaging Server (those the user has the authority to view). Retrieval of images via index fields allows multiple retrieval techniques versus picking the correct file cabinet drawer based on one criteria, usually alphabetic.

Depending on the types of users (state employees versus the public) there are shared responsibilities between agencies and ISD to provide the retrieval function.

Centralized Imaging System Workflow

Workflow is defined as the ability to electronically route work through a variable number of stages, as well as to a variable number of personnel. Workflow further allows a piece of work to be tracked through the routing process. FileNET offers Workflow software to be used in conjunction with Imaging. Workflow is currently installed on the Imaging server, and licenses to use this software can be purchased by agencies interested in adding Workflow to their Imaging project.

Workflow can be implemented as a second phase to an imaging project. This allows agencies to begin using workflow after imaging historical files, and using imaging for current files.

Conclusion

The Centralized Imaging System is proving to be a success. Currently, there are five agencies utilizing the Centralized Imaging System. This number is expected to grow in the next fiscal year and the next biennium as other agencies receive funding for Imaging/Document Management projects.

Geographic Information Services

Montana is facing critical decisions regarding our economy, use of our land, and stewardship of our natural resources. In some cases increased growth and development are starting to affect the quality of life that makes our states so attractive. In other cases, changing economic factors and political decisions are reducing the ability of some of our citizens and local governments to maintain a viable economic base. State and local policy makers as well as citizens and private enterprise are learning more and more about the power of Geographic Information Systems (GIS) to help gain access to the information needed to make educated decisions: decisions that can both expand our economic base and protect our natural resources. Geographic data is voluminous. Imagine all the data associated with every stream segment or every parcel of land in Montana. Geographic Information Systems (GIS) are tools that help manage this tremendous amount of data. One definition of GIS follows:

> The Geographic Information System (GIS) is composed of hardware, software, data, and people, used for assembling, storing, manipulating, and displaying data which contains physical locations (geographic coordinates) of features and information about those features (attribute data).

GIS technology can be used for scientific investigations, resource management, and development planning. For example, a GIS might allow emergency planners to easily calculate emergency response times in case of natural disaster, or agencies or citizens may use GIS to find wetlands areas. Health and social service officials may turn to GIS to help analyze why cancer or heart disease is prevalent in a particular area or why many worker compensation cases come from a certain location.

Increasingly, State of Montana agencies are turning to GIS as a better way to manage an increasing workload and to make important policy decisions. State agencies must interact with local, federal, and private entities to accomplish work. These entities are also turning to GIS as a decision making tool.

GIS Helping Montana Citizens

Montana citizens, private enterprise, and all levels of governmental entities use spatial data every day in their decision making processes. One of the primary benefits of GIS is improved access to spatial data. The Natural Resource Information System (NRIS) provides excellent access to a variety of spatial data at their web site, **http://nris.state.mt.us/gis/gis.html** or a preview of the way local governments can provide citizens property information, visit Yellowstone County's web site at **http://www.ystone.mt.gov**. Land ownership information for many counties is available at **http://gis.doa.state.mt.us** and can save a trip to the local courthouse.

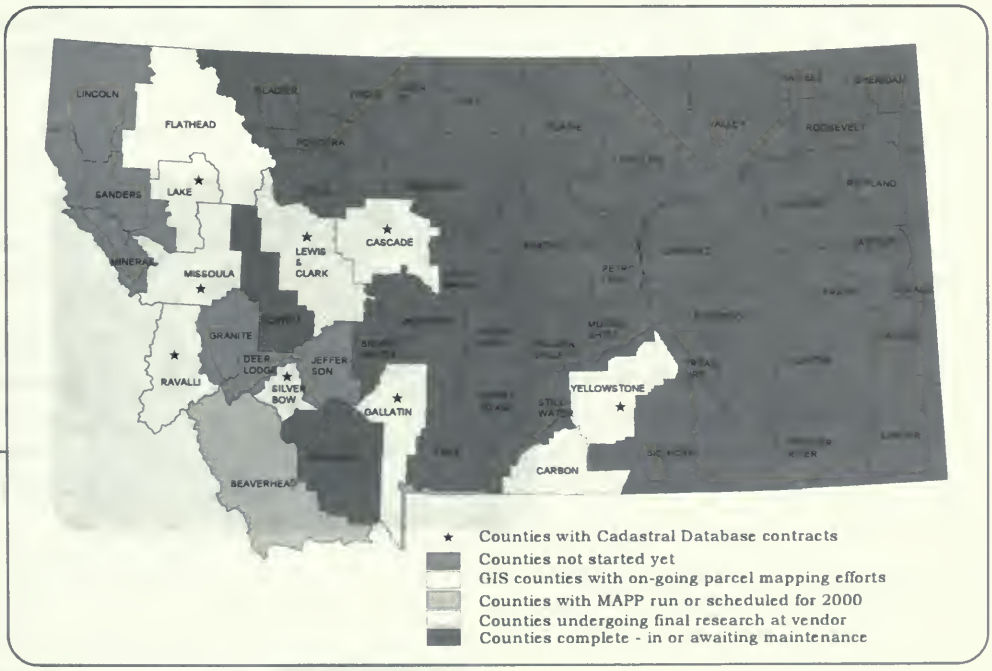
GIS applications are benefiting many Montana citizens. For example, Butte-Silver Bow provides custom-mapping services that are used by realtors, developers, and other business interests. These services were not available before GIS was implemented. The drought index maps produced at the NRIS are reviewed by the Governor's Drought Advisory Council and provide vital information to the agricultural community. GIS technology has long been used to assist the Superfund cleanup of the Clark Fork Basin. As the technology matures and evolves, fields such as health care, social services, and education will use the technology to provide faster, more efficient services to Montana taxpayers.

MONTANA CADASTRAL DATABASE PROJECT

Perhaps the largest geo-spatial data collection effort underway in Montana at this time is the Montana Cadastral Database Project. A cadastral database is one that portrays land ownership and is arguably the most accessed database in Montana. This database is the best possible representation of land parcels that is practical and affordable now, with a built in growth path for improvement in the future. It has been documented with consistent standards, distributed through a centralized point of contact, and maintained for all Montana citizens to access, now and in the future. The database is approximately 75% complete, with the remainder of the counties scheduled for completion in 2001. Please visit our web site at **http://gis.doa.state.mt.us** for the latest project news, to query landownership via interactive mapping, or to download data. The Montana Cadastral Database Project is managed by the GIS Services and Coordination Section within ISD.

Montana Cadastral Database Project - MAP

Parcel mapping status 9/01/2000



STATE GIS COORDINATION

The Montana Geographic Information Council is in its third year of existence and functioning under a newly revised executive order. Please refer to Section 6 for more information on the GIS coordination structure in Montana

GIS LEGISLATION

The Geographic Data Development Trust Fund bill is designed to create a permanent, predictable and stable source of funding for GIS projects including the creation of spatial data. It enables agencies or entities to identify a funding source that may help them leverage cost sharing opportunities for data acquisition or application development. The bill requests $50,000 in general funding that cannot be expended until a matching $50,000 is collected from other local, state, federal and private sources. Initial loans from the fund must provide a 1:1 match. However, grants from the funds interest could be provided with a lower matching ratio. The fund will be administered by the Department of Administration, with projects reviewed by the Montana Geographic Information Council.

Conclusion

GIS technology continues to evolve at a rapid pace. What once was considered a rather elitist field is progressing into a tool that will be commonly available on the desktop, much like word processing software. Montana has barely scratched the surface of the full capabilities of GIS. The State of Montana is dedicated to the advancement of the technology and to efficient and cost effective collection, documentation, distribution, and maintenance of spatial data.

9-1-1

http://www.state.mt.us/isd/groups/9-1-1/

Montana is one of only 16 states that have achieved 100% statewide coverage with either basic or enhanced 9-1-1 service.

Basic 9-1-1 is an emergency telephone service that automatically connects a person dialing the digits 9-1-1 to an established public safety answering point (PSAP). Basic 9-1-1 service requires: a 24-hour communications facility automatically accessible anywhere in the 9-1-1 jurisdiction's service area by dialing 9-1-1, direct dispatch of public and private safety services in the 9-1-1 jurisdiction or relay or transfer of 9-1-1 calls to an appropriate public or private safety agency; and a 24-hour communications facility equipped with at least two trunk-hunting local access circuits provided by the local telephone company's central office.

Enhanced 9-1-1 (E9-1-1) systems must meet the requirements for basic 9-1-1, but also use sophisticated telecommunications technology to automatically display a caller's address on a computer screen in the PSAP when the call is answered. Also displayed is the caller's telephone number, which can be automatically redialed if the line is disconnected. The telephone number display is called automatic number identification (ANI) and the location information is provided with automatic location identification (ALI). In addition, the third component of E9-1-1 service, selective routing, uses a caller's address, not telephone exchange, to direct a call to the appropriate PSAP. This contrasts with basic 9-1-1, which may route the call to a PSAP not capable of dispatching emergency assistance to the caller's location.

9-1-1 JURISDICTIONS

Montana has fifty-nine 9-1-1 jurisdictions. Prior to additional funding for E9-1-1 becoming available on July 1, 1997, most of the State's 9-1-1 jurisdictions provided basic 9-1-1 service only. A few jurisdictions had ANI displaying the telephone number of the calling party, but only the greater Billings area had E9-1-1 that also provided ALI.

As of June 1, 2000, five counties (Gallatin, Sheridan, Daniels, Valley and Roosevelt County/Fort Peck Tribes) have implemented E9-1-1 for the entire jurisdiction. In addition to Yellowstone County, Cascade, and Butte/Silver Bow Counties have implemented E9-1-1 for the major population areas and plan to extend the service to the rural areas in the near future. Malmstrom Air Force Base formed a separate 9-1-1 jurisdiction and has a fully enhanced 9-1-1 system.

FUNDING

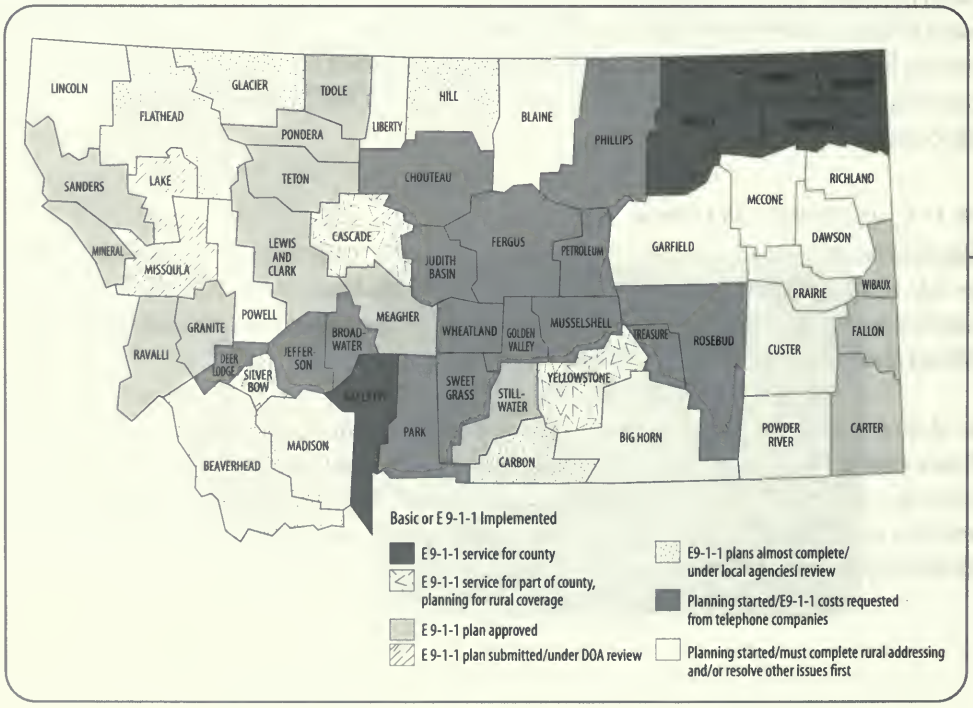
Funding for the implementation and operation of basic 9-1-1 systems is generated through a monthly $0.25 fee on each telephone subscriber's access line, with some exceptions for non-taxable entities. The funds collected are allocated to local governments on a per capita basis after program administration costs have been deducted. During the 1997 legislative session, the monthly fee for 9-1-1 was increased to $0.50 per access line, with the additional $0.25 providing funding for E9-1-1.

E9-1-1 PLANNING ACTIVITIES

Each local 9-1-1 jurisdiction will receive its share of the E9-1-1 fund once the E9-1-1 plan has been submitted to and approved by the Department of Administration.

To assist local jurisdictions with E9-1-1 planning, the 9-1-1 Program Office has compiled, published, and distributed The E9-1-1 Coordinator's Handbook and the Montana Addressing Guidebook for Local Governments to all local governments and all 9-1-1 jurisdictions in Montana. A ìmodelî Request for Proposals (RFP) has been developed for use by local jurisdictions preparing to purchase new telephone equipment needed to handle E9-1-1.

Montana E9-1-1 Status



CURRENT E9-1-1 STATUS

- **E9-1-1 plan approved:** Granite, Lewis and Clark, Meagher, Mineral, Pondera, Ravalli, Sanders, Stillwater, Teton, Toole, and Yellowstone Counties, the Town of West Yellowstone, and the Fallon/N. Carter/Wibaux County 9-1-1 jurisdiction

- **E9-1-1 plan submitted for review:** Lake and Missoula Counties

- **E9-1-1 plans almost complete and under local agencies' review:** Beaverhead, Carbon, Flathead, Glacier, Hill and Madison Counties

- **Planning started/E9-1-1 costs requested from phone companies:** Anaconda/Deer Lodge, Broadwater, Chouteau, Jefferson, Mussellshell, Park, Phillips, and Sweet Grass Counties, the City of Lewistown, and the Wheatland/Golden Valley, Rosebud/Treasure and Fergus/Judith Basin/Petroleum 9-1-1 jurisdictions

- **Planning started/completing rural addressing and resolving other issues:** Big Horn, Blaine, Dawson, Liberty, Lincoln, McCone, Prairie, Powder River and Powell Counties, and the Custer/Garfield 9-1-1 jurisdiction

- **Wireless E9-1-1:** In addition to implementing E9-1-1 from wireline telephone service providers, PSAPs must prepare for wireless E9-1-1, which requires different technology for delivering the E9-1-1 information. Although the proliferation of wireless phones has improved notification time for emergencies in rural areas, the volume of calls to PSAPs has increased, and these calls are often time-consuming, especially when the caller cannot provide accurate location information.

FCC Rules (Docket 94-102) require wireless carriers to implement E9-1-1 service in two phases. Phase I requires wireless carriers to deliver, after April 1, 1998 and within 6 months of receiving a request for the information, a call-back number and the cell site or cell sector relaying the 9-1-1 call. For Phase II, to be available by October 2001, the wireless carrier must provide a callback number and the location of calling telephone within 100 meters for network-based technology, and 40 meters for Global Positioning System (GPS) technology, and be accurate 67% of the time.

The Wireless Communications and Public Safety Act of 1999, sponsored by Senator Conrad Burns, encourages states to upgrade 9-1-1 capabilities and to deploy reliable wireless E9-1-1 service to meet the Nation's public safety needs. To address this issue a Wireless E9-1-1 Trial was conducted in the greater Billings area in 1999 using a technology known as "location pattern matching" to determine the location of the wireless caller. The purpose of the trial was to design, deploy, and evaluate a wireless E9-1-1 system capable of meeting and exceeding the requirements for locating

wireless 9-1-1 callers, as established by the FCC 94-102 mandate. A team of nine government and industry organizations, including the Montana 9-1-1 Program and the Billings 9-1-1 Center, participated in this trial. We believe the results, published in June, 2000, provide valuable information for those responsible for making decisions related to deployment of wireless E9-1-1.

Conclusion

It is imperative that efficient, reliable 9-1-1 service be available to all Montana citizens and visitors to the State. Radical changes in the field of telecommunications in recent years are having a tremendous impact on 9-1-1 systems, and the new technology available for use at the PSAP can improve efficiency but is also expensive. In addition, the need for improved dispatcher training to prepare for new technology and other changes in the field can no longer be ignored. The State of Montana is committed to working with local 9-1-1 jurisdictions to address these and other issues that 9-1-1 professionals will face in the 21st century.

Disaster Recovery Planning

Disaster recovery planning is the ability to respond to a major interruption in services by implementing a disaster recovery plan to restore an organization's critical business functions. (A major interruption would be one that lasted more than 48 hours). This includes the state's mainframe, mid-tier, and stand-alone hardware, as well as the network.

When people think of a disaster they typically think floods, fire, earthquake, and such. However, more disasters are incurred by businesses that are caused by humans than by Mother Nature. Human disasters include bombings, sabotage, viruses, and human error. Major interruptions of normal computer processing could cripple the State of Montana. Disaster recovery planning develops strategies to maintain computing in the event of a major interruption. The integrity of the state's vital records depends greatly upon a well-developed disaster recovery plan. Disaster recovery planning balances the risks of having a major disaster with the costs of preparing for and recovering from one. Agencies must evaluate the risks, the costs and the funding available for those costs. They must also consider what the consequences would be for failing to act. The goal is to provide enough insurance to recover from a major disaster without spending so much that you cannot afford to continue business operations.

DISASTER RECOVERY AT THE STATE OF MONTANA

The State of Montana has made great strides in its disaster recovery planning and testing efforts over the last several years. The state is in a good position to be prepared to restore the mainframe computer and its applications, as well as certain applications running on mid-tier platforms. Yearly disaster recovery tests continue to confirm our ability to successfully recover the mainframe, some mid-tier servers, numerous agency applications, and portions of the statewide telecommunications network.

Future Drills and Efforts

The next disaster recovery drill is will likely take place in May 2001 at the recovery facility in Federal Way, Washington. The focus of the drill will be the recovery of the mainframe with its new operating system, and the recovery of more mid-tier platforms. The scope will also be expanded for the recovery of LAN and WAN functionality, including establishing a connection between the hot site and Helena. Future testing will again expand the ability to recover more portions of the mid-tier platform applications and of the network. Future efforts will focus on an increased level of agency participation, prioritization of the systems to be recovered, coordination of individual agency LAN recovery plans, and business continuity planning development and testing.

Conclusion

ISD has been working diligently on the State of Montana disaster recovery planning needs, and continues to oversee the development and testing of its disaster recovery plans and provides assistance to agencies in the development of their individual disaster recovery plans.

ISD's role in disaster recovery is to provide the facility, personnel, and equipment necessary to run critical agency applications in the event of a major disaster. To date, ISD has completed numerous successful drills, proving the ability to recover the state's data center at the recovery facility.

Information Security

Introduction

The goal of the state's information security structure is to provide confidentiality, integrity, and availability of all information resources. Information technology resources in the State of Montana consist of data, applications, operating systems, and the physical infrastructure of the computer systems. These resources are valuable state assets because they are used by state agencies for promoting more efficient and cost-effective services. They must be protected from information security threats while being made readily accessible by authorized individuals.

The security needs of agencies have changed over the last several years. The move of applications to web based environments with access from other entities, including the public, has proved to be a challenge for information security. Because of these requirements, the way security measures are implemented has changed.

Confidentiality

One of the changes that has taken place in the security arena, is the use of Virtual Private Networking (VPN). Resources including the state's e-mail system, mainframe and other information resources have been made available through secured channels over the Internet. The use of VPN allows information to be accessed in a secured or encrypted fashion over the Internet without compromising confidentiality. This application is being utilized by various agencies within state government for multiple applications.

Integrity

One of the biggest security threats for information resources is a virus attack. To alleviate this threat, virus scanning software has been implemented on all desktop computers as well as on agency file servers. Three years ago, 85% of viruses originated from diskettes. At this time, 85% of viruses come from e-mail. Because of this change in virus activity, ISD has implemented virus scanning software on all e-mail servers as well as the servers that route Internet mail. This means that every piece of e-mail along with any attachments is scanned for virus infection.

Availability

As agencies move toward outsourcing of application creation as well as implementing the use of applications by local government entities, these entities must have access to many of the state's computing resources. State agencies are also moving many applications to web based environments that the public has the opportunity to access. In order to accommodate these types of processes, as well as provide security to the state's information resources, the network has been segregated into different security areas. Web servers, contractors, and the Internet have been separated from the rest of the state's computer network to provide proper connections and

security. ISD has worked with local government entities to provide them with the best connection configuration and to provide security to both the state and local government entity networks.

Conclusion

To provide confidentiality, integrity, and availability of the state's information resources, security policies must be in place and the education of the state's computer users must be accomplished. To achieve the level of security needed, ISD is continually updating its policies and procedures in regards to information security. A two-hour class is also offered at no charge to all state employees to help educate them on the state's policies as well as other information security topics. By providing this educational opportunity, employees are made aware of current issues and procedures that they can perform to make the state's information resources more secure.

The goal of ISD is to maintain a secure environment for data and computing resources while allowing employees, as well as the public, access to information that they need. With the policies and procedures being updated continually and training being provided to all employees, the protection of the state's information is guaranteed.

Montana Public Safety Communications

In January 1999, the proposal for funding of the Montana Communications Shared System Design failed to gain approval in legislative subcommittee. As a result, a number of planned design tasks remaining to be undertaken were canceled. The following are the three design tasks that were completed of the six originally scheduled.

Final System Design– The Final System Design was configured to incorporate a VHF Digital Trunked Radio System with backward analog compatibility to all users. The Project (APCO) 25-Phase I - FDMA Standard was the platform chosen for the statewide system, which permits backward compatibility, and allows for narrow band utilization and data transmission. The design allowed multiple users to share a common radio infrastructure which was capable of supporting many thousands of different "talk groups" rather than the limited current channel and frequency usage.

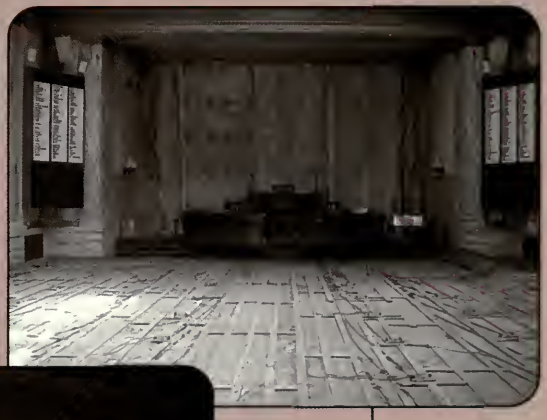
Request For Proposal–A "boilerplate" RFP was developed.

Frequency Plan–A preliminary Frequency Plan was completed.

Future Interoperability Endeavors

To respond to public safety communications issues as they may develop, Governor Marc Racicot signed Executive Order No. 14-00 on May 31, 2000, renewing the Montana Public Safety Communications Council for a period of two additional years. The Council will assist in solving pressing statewide public safety communication issues as they develop, including spectrum, standards, technology, security, funding, coordination and partnerships.

Agency Information Technology Projects



DEPARTMENT OF AGRICULTURE

INFORMATION PROVIDED BY:
FRIEDA HOUSER

http://agr.state.mt.us

IT STRATEGIES

The Department of Agriculture uses information technology (IT) to streamline operating processes while providing cost effective and pertinent information to the public. We are better able to serve Montana Citizens by having information available at the touch of a button. The Department is proposing a comprehensive IT plan for the 2003 biennium. The plan will provide for electronic government transactions and communications with the public. Issues that will need to be addressed are improving the current website and working together with the Department of Administration, Information Services Division (ISD) to ensure business conducted through the Internet has a common, user-friendly format and structure for each state agency.

CURRENT IT PROJECTS

The Department of Agriculture has been and will continue to work on:

- Conversion of all site networks to NetWare 5.
- Upgrading database systems to Oracle.
- Installing and using the new Laboratory Management System in the Analytical Laboratory on the MSU campus in Bozeman, which runs on its own Oracle server.
- Work with the State Grain Laboratory in Great Falls on an Oracle database system running on its own Oracle server.
- Converting agency desktops to Windows 2000.
- The SABHRS user interface both in Helena and at remote sites through Citrix MetaFrame.
- Electronic interface between SABHRS and the Department's Oracle Crop Hail Insurance database system.
- The One-Stop Business Licensing Project with other agencies.
- Upgrading the Oracle server hardware running the latest Oracle server software in Helena.
- Maintaining a high level of communications and standards between the IT staff and the rest of the agency.
- Completing a marketing contacts program in Oracle to track contact with current and potential customers of Montana's agricultural products.

IT PROJECTS FOR FY02-03

- Continue converting database systems from dBase to the state standard of Oracle in order to offer information more efficiently and publish useful information on the Internet.
- Work with ISD to establish the infrastructure and security for the Department to accept electronic funds transfer (EFT) pertaining to the crop hail insurance premiums.
- Publish licensing information on the Department's web page. This will provide better service to our customers by keeping them informed of what products may be available and where they may be obtained.
- Implement a bar coding system for the pesticide licensing and registration programs. The system will be used to streamline the renewal process, the data entry of re-certification credits, and determine if a person is licensed to purchase pesticides by pesticide dealers.
- Use electronic reporting methods from the Analytical Laboratory to share results with other federal and state agencies and with the public.
- Upgrade the current network topology from Token Ring to Ethernet.

IT STRATEGIC DIRECTIONS BEYOND FY03

- Provide the ability for Montana citizens to purchase crop hail insurance policies, as well as feed, fertilizer, and pesticide licenses and registrations on-line, allowing electronic funds transfer of payment from bank accounts, credit, and debit cards.
- Provide the ability for buyers and sellers of Montana's agricultural products to meet and transact business on-line.
- Adapt our IT strategic directions as new technology is made available that is cost effective and efficient for the Department to implement.

Agency Information Technology Projects

Introduction

This section presents the state of information technology for each agency in state government. The information in this section covers agency accomplishments, ongoing projects, and future directions.

State agencies use information technology (IT) for streamlining internal processes and for providing efficient, cost-effective, and appropriate public services and educational opportunities. Each agency is responsible for establishing its own IT goals, objectives, and plans. To ensure network and statewide IT strategic plan conformance, agencies work with the Information Services Division of the Department of Administration when procuring hardware, software, and private-sector services.

Discovering Montana—State Government on the World Wide Web

Discovering Montana, Montana's homepage on the Internet, is a great way to find out more information about Montana. The homepage emphasizes government information and there are many links to Montana information (such as weather) that are more general.

More than 27 agencies are accessible through Discovering Montana, as are universities and K–12 schools. The web page is also a great source of travel and tourism information. There is a direct link to legislative information from the Discovering Montana homepage. A Montana photo gallery and search capabilities are also present.

Here is a list of just some of the government information accessible via the Internet and Discovering Montana:

- Tax Information
- e-government services
- Permits and licensing
- Purchasing bids
- Job openings
- Public assistance
- Tourism and recreation
- SABHRS
- State maps
- Local government web pages

Department of Administration

Information Provided by:
Hank Voorberg

http://www.state.mt.us/doa

IT Strategies

The mission of the Department of Administration is summarized by the following statement: *"The Department of Administration strives to deliver superior and responsive services to agencies, employees, and the public while minimizing costs and maximizing effectiveness."*

The Department's IT strategy is directed by this statement, with emphasis on the efficient delivery of services. The Department is actively working to change the delivery of services by electronic means to fit with the state's overall strategy of implementing e-government ideals.

Several examples demonstrate the Department's commitment to e-government strategies: electronic posting of RFPs, electronic posting of job announcements, surplus property and supply catalogs available electronically, electronic transfer of funds and cash transactions, and administration of state purchasing card. The next few years will see the Department continue to develop and enhance these projects as well as developing new means of delivering all its services electronically.

Current IT Projects

- The Department completed the implementation of the MT PRRIME project—purchasing and installing PeopleSoft products to centralize the state's financial and human resource data. The day-to-day operations are now centralized at SABHRS under the direction of ISD.

- The Department continues to focus a great deal of resources on providing information to other state agencies and the public through electronic means. To accomplish this, a large amount of information is disseminated through the Department's Internet web site, such as bid proposals, personnel policies, and additional information. The Department is continuing its development of efficient means of distributing information in an electronic format.

- The Department centralized network and desktop support. Two staff members support over 150 users and five network servers located throughout Helena. Centralization allows the support staff to be more efficient and responsive.

- The Department supports and maintains the Purchasing Accounting Reporting Information System (PARIS), a program designed to allow agencies the ability to make small purchases, currently defined as $5,000 or less per transaction, using a purchasing card (MasterCard). The intent is to increase efficiency by eliminating manual steps and costly paperwork required to make small purchases. For more information see **http://www.state.mt.us/doa/paris/paris.htm.**

- The Department continued to expand the Montana Public Vehicle Fueling Program in order to offer a convenient, cost-effective means for fueling government vehicles. The fueling program, through a network of government and commercial fueling sites, assists state agencies in tracking and controlling fuel costs through the use of monthly comprehensive fuel management reports. The accounting and transaction processing functions associated with vehicle fueling are automated. In addition, it offers a system of security and maintains the integrity of the Department's tax-exempt status for transactions anywhere on the fueling network. For more information see: **http://www.state.mt.us/doa/ppd/fuelprog.htm.**

- The Department's Personnel Division participates in the Montana Job Source by making job announcements available to the public through the Montana Job Source Internet site. The Personnel Division additionally disseminates employee benefits information through the Folio information server located at the State Library. For more information see **http://statedocs.msl.state.mt.us/default.html**.

IT PROJECTS FOR FY02-03

- In the 2000–2001 biennium, the Department will create an Intranet site to electronically provide interactive information such as vendor lists and Department manuals to personnel throughout the Department.

- The Department will work with other departments to assist in implementing the additional SABHRS (PeopleSoft) modules and importing their information into the SABHRS (PeopleSoft) System.

IT STRATEGIC DIRECTIONS BEYOND FY03

- Electronic filing of travel & expense forms
- Electronic timesheet entry
- On-line surplus equipment auctions
- On-line proposal and bid submittal
- Intranet purchasing system for all agencies
- EFT/ACH (electronic) payment remittance to significantly reduce state warrant writing
- Issuance of purchase orders electronically

Department of Administration —Information Services Division

http://www.state.mt.us/isd/index.htm

IT STRATEGIES

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- administration of state purchasing card.

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CURRENT IT PROJECTS

Computing Technology Services Bureau

- Application Support—ISD supports a multi-platform application environment with strong expertise in legacy systems and Oracle database. The portfolio of tools used to support development in the Oracle environment continues to be enhanced.

- Oracle Support—Oracle 2000 Designer and Developer are the supported application development tools for client/server applications. With the development of major client/server applications by agencies, the number of application developers has grown significantly. Oracle education at the Helena College of Technology continues to be offered. Designer/developer applications have been successfully made available to Internet users through the Oracle Web Server.

- LAN Support—ISD Staff provides services to support smaller agencies and to assist agencies with LAN Administration on a fee for service basis. Customers were Military Affairs, State Library, Historical Society, Consumer Counsel, Political Practice, and Administration (SABHRS and ISD).

- Desktop Services—ISD provides connectivity, common software and problem resolution services to approximately 10,600 network nodes. Common software provided under the desktop cost recovery rate includes the network and workstation operating systems and the Microsoft suite of office productivity products, such as Word, Excel and Outlook (e-mail).

- Data Storage—ISD has made investments in advanced data storage technology. The automated tape library system uses robotic technology to provide faster and more accurate tape handling than can be done manually. Our network-based disk storage technology provides high volume, low-cost direct access data storage that can service multiple computing platforms. Storage growth can be accommodated economically with this system. We have continued to expand our RAMAC Virtual Array 2 Turbo storage subsystem, referred to as RVA, as data storage demands continue to grow.

- Database Growth—As Oracle database and enterprise applications are deployed there will be an increased need for reporting tools for the desktop.

- Data Warehousing—Agencies have an increasing interest in sophisticated analysis of the vast amounts of data captured in production databases. This analysis will require the creation of an environment designed specifically for such analysis. Our Oracle database products provide an excellent foundation. It is important to realize that an analytical computing environment, though sharing underlying technology, differs significantly from the production, transaction-oriented environment.

- Central Imaging Services — ISD has created a centralized service for the storage and retrieval of document images in support of agency needs. The FileNet "Panagon" image management software has been installed on a large IBM RS/6000 machine. More than half a dozen agencies subscribe to the service, with several more in the early stages of exploring this technology.

- Network Operating System Support and Management—It is important to increase the support and provide direction for the State's data network operating systems, especially as the complexity of our distributed environment increases.

- Directory Services — Directory technology is emerging in the industry as a way to facilitate more streamlined administration of and access to diverse computing resources. Single sign-on is a common example of the capabilities directories can provide and rule-based directory

systems permit business events, such as the hiring of a new employee, to trigger a number of automatic system administration activities. ISD is embarking on a directory services strategy effort to set the direction for directory implementation.

- Application Hosting — ISD has begun to offer hosting of client/server applications in a 3-tier architecture. This permits the application to execute on an application server, which interacts with both a database server and the client workstation through a browser. The advantages of this approach are greatly simplified application administration, reduced bandwidth requirements, and less computing power required at the desktop resulting in reduced overall cost and improved performance. These hosting services are offered both inside the firewall for applications serving agencies and outside the firewall for applications serving citizens or other constituents.

- True 7x24 computing — There is an increasing demand for true 7x24 availability of our enterprise computing environments. The advent of e-government has brought this need to the forefront. Web-based and Interactive Voice Response (IVR) applications that allow citizens to self-serve themselves with state services are at the center of this demand. ISD is committed to delivering high-availability systems, including 7x24, wherever needed and justified. Meeting this commitment will certainly require significant investment in parallel computing and network resources.

- Enterprise Mid-Tier Computer Support — ISD has experienced continued rapid growth in the number and size of application databases housed on mid-tier computers. While we still support existing DEC systems, our direction is to continue our growth of IBM AIX and Intel NT platforms. This growth will continue with the implementation of major systems for DOLI and FWP along with continued growth of DOA and DOR applications.

Internet Technology Services Bureau

- The Internet Technology Services Bureau is in the process of implementing a new interface to the State's web portal, Discovering Montana (previously Montana Online). The new interface groups links by business process rather than by agency. Grouping information this way will make the portal more user friendly for all users of the portal.

- The State is in the process to select a private vendor to assist with electronic government services and the management of the State's web portal. The strategy is to select a private vendor to provide services based on the self-funded portal model where small transaction fees are added to services to fund the initial investment of providing the service online.

- The Internet Technology Services Bureau is implementing a statewide intranet web portal to provide service to state employees. The intranet portal will provide employees information on

policies, training schedules, holiday schedules, and other pertinent information as well as providing service applications like electronically routed travel request forms, travel reimbursement forms and time entry capabilities.

Network Technology Services Bureau

- Ethernet Conversion–The Department of Administration, Information Services Division adopted a policy to support Ethernet and Token Ring Frame Relay Local Area Network (LAN) topologies. The State's current Local Area Networks consist primarily of Token Ring architecture throughout the network. Over the past several years, Ethernet architecture has become the industry standard Local Area Network architecture and many applications are now developed based on an Ethernet Topology. As the predominance of Ethernet increases, industry support and continued development of the Token Ring environment has declined. Bandwidth requirements to the desktop are increasing to meet agency-computing needs on the desktop. Switched Ethernet provides the best long-term solution to meet those needs.

- SummitNet Growth–The State and University Integrated Network (SummitNet II) needs have grown substantially over the past four years. In response, Information Services Division released a Request for Proposal (RFP) for high-speed network services. A contract was awarded to Qwest, Touch America and CenturyTel for the deployment of a high speed Asynchronous Transfer Mode (ATM) switched network. ATM switches will be installed in 10 Montana communities to support both private and public access needs. ATM switches will also be deployed at major state and university campus locations throughout the state. ATM technology will allow the state to consolidate existing voice, video and data networks into a single network infrastructure. This project is expected to be completed over the next 12 to 18 months.

- Tele-management System–Information Services Division and units of the University System awarded a contract for the development and implementation of client/server Telephone Management System. The Tele-management system provides telephone long distance telephone bills for all agencies of state government, telephone directory services, equipment inventory, campus cable management and work order management capabilities. The new system will allow each campus to maintain individual databases within the system. This system will go on line the fall of 2000.

SABHRS Services Bureau

- The SABHRS Services Bureau, supports the State's core management information system, referred to as SABHRS (Statewide Accounting, Budgeting and Human Resources System). The SABHRS implementation project, known as MT PRRIME, began in October 1997. The SABHRS was implemented on a phased-in basis, beginning with the budget development component in August 1998. The Asset Management module was rolled out in October 1998, followed by

Human Resources, Payroll, Benefits Administration, and Time and Labor in April 1999. The final components of SABHRS, including the General Ledger, Accounts Payable, Accounts Receivable and Purchasing modules were implemented in July 1999.

- Upgrades to the accounting, human resource and budget components of the SABHRS are scheduled for implementation during the 2000-2001 biennium.

- Implementation of a new procedure for distributing and accessing the SABHRS is scheduled for the 2000–2001 biennium. This procedure will centralize control of the application, thus providing a more stable technical environment and reducing the dependency on agency local area network support staff.

IT PROJECTS FOR FY02–03

Internet Technology Services Bureau

- The Internet Technology Services Bureau will continue to work with the private vendor selected to manage the portal to provide government services online.

- Further development of the intranet web portal and offering employee services online will occur.

SABHRS Services Bureau

- Upgrade projects involving the Finance, Human Resource and Budget components of the SABHRS will commence during the 2002–2003 biennium. Completion of these projects may extend into fiscal year 2004. It is anticipated that these upgrades will result in a further stabilization of the applications and technical environment, and bring additional functionality and efficiency to the State's business processes. It is anticipated that the upgrades will contain significant advances in the utilization of web enablement and e-commerce technology. The successful implementation of these upgrade projects is dependent upon the continued funding of seven new positions for the SABHRS Services Bureau. The impacts on agencies could include the need to revise interface programs, participate in training programs, implement hardware and software changes, and re-engineer business processes such as time entry from employee desktops and budget monitoring. To take advantage of these enhancements it is important that the SABHRS Services Bureau receive funding for two additional positions that will support HR and Finance production areas. These positions will provide agency support for the General Ledger and Human Resources modules.

- During the 2002–2003 biennium the SABHRS Services Bureau will implement a data management plan. This plan will address record retention and retrieval requirements associated with SABHRS data. The key objectives are to 1) remove unnecessary data from the production

database which should enhance system performance; 2) address long-term data record retention requirements; and 3) develop a reporting environment that empowers users to access the data needed to make effective and timely business decisions. The successful implementation of this project is dependent upon the funding of one new position for the SABHRS Services Bureau.

IT STRATEGIC DIRECTIONS BEYOND FY03

SABHRS

- Montana's decision to invest in packaged software was predicated on the expectation that the providers would continue to enhance these products in response to technological advances. As these enhancements occur and become available to customers, the State of Montana must be positioned to implement upgraded versions of the software. This upgrade effort will require the continued funding of the seven new positions added to the SABHRS Services Bureau during the 2000–2001 biennium. In addition, the State must continue to enhance its network capabilities and prepare to shift direction related to hardware and software structures as the technical environment changes. It is particularly important to prepare for the movement towards web enabled applications and expanded e-commerce capabilities which could position the State to improve business processes and provide enhanced services to the public.

Board of Education

Information Provided by:
Heidi Redman

http://www.montana.edu/~wwwbpe

IT STRATEGIES

- Maintain local, state, national, and international communications via the Internet
- Conduct educational research on pertinent topics
- Reduce printing, postage, and paper costs by posting rules, initiatives, and policy decisions on the website
- Purchase equipment, supplies, and periodicals via the Internet
- Interface with state computer systems for a variety of bureaucratic functions

CURRENT IT PROJECTS

- The Board of Education provided computers for their entire office staff. In order to share computers with the appointed members of the State Board of Public Education (SBPE), the Board of Education began upgrading their computers and allowed the SBPE members to utilize the older computers. They are doing this to assist members in taking advantage of electronic mail and Internet research capabilities. The Board plans to continue to provide computers to Board members until all members have a computer and access to electronic mail and the Internet.

- The Board of Education connected their network to the University System network through the Commissioner of Higher Education office co-located with them in the Commissioner's building. This allows them to easily share information with the University System.

- The Board of Education created a web site for the office. Staff are being trained how to publish information to the web site. As meetings are held information will be disseminated to Board members and the public. Some of the information included on the web site follows:
  - Information about the Board
  - Meeting minutes, agendas, and committee information
  - Hearing rule changes
  - Office contacts
  - Publications

IT PROJECTS FOR FY02–03

- The Board of Education plans to continue providing computers to Board members until all members have a computer and access to electronic mail and the Internet.

- As the Internet grows, the Board of Education plans to utilize it to its full potential as a research tool. The office also plans to keep its computing technology at a current level to maximize office efficiency. The office staff will continue to strive to learn more about computing technology to make the best purchases for their business needs.

Department of Commerce

Information Provided by:
Gary Wulf & Paul Gilbert

http://commerce.state.mt.us
http://travel.state.mt.us

IT STRATEGIES

- The Department strategy is to expand the use of the Internet and e-commerce to deliver services. With the Internet the most widely accepted delivery vehicle, internal systems will also be converted to Internet access to present a common face to both customers and employees. For example, the Census and Economic Information Center (CEIC) is working to make its data and information more accessible via Internet and Intranet applications. While printed reports and maps are valuable, the goal of the unit is to move all of its information into a data warehouse environment. This new structure will increase information access and the variety of custom information products that can be created by CEIC staff and clearinghouse patrons.

CURRENT IT PROJECTS

- Federal Building Move. As space becomes available, employees from several of the department's Helena locations are moving into the Federal building. Local Government Services moved in December of 1999, Building Codes Division in June 2000 and POL Division will move late July 2000. A new program is also housed in the federal building. The remainder of Commerce moves are tentatively scheduled for mid-2001 after new buildings to house the remaining Federal tenants are completed.

- Mainly because of the lower cost of Ethernet vs. Token Ring network equipment, the Federal building computer network uses Ethernet. PCs purchased within the last couple years have been bought with Ethernet capability. Older ones need add-in network cards.

- The Board of Investments completed converting all PCs to Windows 95, and are working now on converting to Windows 2000. The board has completed converting its Informix database to Oracle, and will be working over the next year to convert its Mortgage accounting system (currently using a platform called ALICE through AOD in Florida) to Oracle. Also underway is the imaging of mortgage files, which will also be done with various other programs that store vast amounts of paper.

- CEIC is currently reviewing and redesigning its entire web site to make it easier to use and update with current information and to provide more mapping and custom report capabilities.

- CEIC is scanning all of its County Statistical Reports for each Montana county to make the reports available on both its web site and on CD-ROM. Currently, only statewide data from the Report is available on the web site; individual county information is available only in printed form upon specific request to the CEIC.

- CEIC is adding more geographic information system (GIS) capabilities to its services. The new GIS services include:

  - Assistance to users to identify, acquire, and use data in a GIS;

  - a clearinghouse of data from the US Census Bureau and other agencies;

  - technical assistance to develop GIS applications related to demographic and socioeconomic needs; and,

  - technical assistance for users to prepare and integrate CEIC data into their GIS applications.

- CEIC will catalog its library collection using the Online Computer Library Consortium (OCLC) system. This project will allow CEIC to better manage its collection and make the collection searchable from anywhere via the Internet.

- The Professional & Occupational Licensing (POL) division web site **http://commerce.state.mt.us/License/POL** was created and the first phase, enabling the downloading of licensing forms, was completed. POL provides information to the general public regarding professional and occupational licenses and the Licensing Boards that govern them. The purpose of the POL web site is to give public access on the Internet to that information. Information obtained from the forms submitted for licensing is used to cross reference names with other state and federal licensing databases in order to check on the history and current licensing status of applicants to protect the public. The database in which the information is housed was converted to Oracle during the last two years.

- The Montana State Lottery now has a web site that has information on winners, winning numbers, and information on all Lottery games and how to play them. It also includes general information about the Lottery. Individuals can now download a prize claim form from the web site and are able to ask questions about the Lottery and receive their response via e-mail. Soon, the Lottery's Annual Financial Report will be available on the web.

IT PROJECTS FOR FY02-03

- The Department will improve the POL web site by creating a system for the electronic entry of licensing information on the Internet. Currently the licensing forms are available for download, but with the new system, applicants will be able to fill out and submit the forms online. This will streamline the application process by minimizing the possibility of data entry mistakes and limiting the amount of individuals who handle the licensing information.

- As time and funds permit, Commerce will research imaging and document management systems in relation to streamlining information filing, retention, and access times.

- The database server used by the department for Informix and Oracle databases will be six years old in August of 2000. Replacement will be necessary early in FY2002.

- Perform research and analysis to determine the feasibility of providing field agents with remote access to the Helena office information systems.

- The Census and Economic Center is developing new services to allow users to access the full range of Census data (population, socioeconomic, geographic, redistricting, etc.) and business and economic data via the Internet. All of the Census 2000 data for Montana will be housed on an Internet server in SQL Server and Spatial Database Engine databases. Users will be able to create interactive, custom queries, reports, and maps from the data. Along with general public access to the service, the database and applications will internally serve CEIC staff and Department employees when filling requests for information and services on behalf of others or when conducting internal analyses. This new integrated approach to data management and access will:

    - Provide 7 days/week, 24 hours/day access to the full range of census, business, and economic data.

    - Provide rapid and direct access to Montana specific information.

    - Allow users to not only retrieve pre-formatted tables of data but also retrieve the raw data for their own analytical needs.

    - Allow users to create custom reports that meet particular purposes.

    - Allow users to search geographically, examine the spatial relationship among the data, and graphically visualize the tabular information.

- Provide users the ability to retrieve the most current data, as user requests will directly access the database.
- Provide more analytical tools and reporting functions to better serve both our external users as well as internal Commerce staff.

IT STRATEGIC DIRECTIONS BEYOND FY03

- CEIC plans to continue in its efforts to increase access to its information and will build on its database creation efforts in FY02–03 by adding applications to allow users to conduct a wider variety of, and more complex analytical operations on the data.
- Increase imaging capability.

Office of the Commissioner of Higher Education —The Montana University System

Information Provided by:
Edwina Dale

http://www.montana.edu/wwwoche

IT STRATEGIES

The Montana University System (MUS) has made tremendous progress in its use of information technology to improve services, integrate information among business functions, and integrate information among all campuses. Information technology infrastructure and support have become critical to almost all University System operations. Despite limitations in equipment and technical support, the University System continues to aggressively pursue the use of technology to provide high-quality educational experiences to students, broaden access to programs, promote lifelong learning, and to more efficiently manage resources.

CURRENT IT PROJECTS

- **Distributed Learning:** In February 2000, eCollege and the Montana University System announced corporate funding for joint online course development in several academic programs. Campuses received over $500,000 for the following programs: Bachelor's in liberal studies and mater's in information processing and communication at MSU-Billings; bachelor's in nursing (completion program) at MSU-Northern; master's in educational leadership at the University of Montana; joint master's in project engineering and management from MSU-Bozeman and Montana Tech. In addition to corporate-funded projects, campuses have increasingly developed courses and programs for electronic delivery, preferably online. The Montana University System invested $200,000 to encourage this work in FY2000 and plans another, similar expenditure in FY2001.

- **Banner:** The University System's first statewide information technology system, Banner, was implemented for student records, human resource, and finance systems. It provides an integrated planning and management database for review of campus performance and management of the University System. It also aids the University System by streamlining the reporting process for administrative management and by providing direct, online access to information by students, faculty, and staff. There is considerable work left to be done to customize reports and more fully incorporate web-based services for individuals.

- **SABHRS:** An interface between Banner/Finance and the State's new SABHRS system was developed to integrate and convert current and historical data, along with data from Banner/Human Resources, Banner/Student, and Banner/Financial Aid.

- **Montana University System Data Warehouse:** With MSU and UM now using the same applications system (Banner) based on the same database (Oracle), the University System has been able to share expertise and labor in developing reports programming. Operating from a common environment also provides the opportunity to consolidate information into a single data warehouse so that Montana will, for the first time, have a single and integrated view of student degree progress, migration among campuses, etc. The project is now underway and is making rapid progress with substantial involvement of Institutional Research staff of MSU and UM. By September of 2000, the project will have a single source of statistical information about MUS students and a set of reporting and viewing tools to provide easy access to that information. The project will be implemented in three phases. Phase I will focus on student information within each of the two universities. The resulting system will provide standardized mandatory state and federal reports that will be consistent across all campuses of the Montana University System. Phase II will consolidate the information from the two university systems into a single MUS data warehouse so that, for example, the graduation rate for the University System as a whole can be determined. Phase III, not yet funded, would provide similar capabilities for financial aid, finance, and human resources systems. The initial focus of the warehousing project is on making student related data available, with a target date of Fall 2000 for the completion of initial implementation.

- **Internet2:** Both senior universities implemented connections to the Next Generation Internet (Internet 2). Internet2 is a next-generation, very-high speed data network available only to qualified educational and governmental institutions. For faculty, staff, and students this connection has meant a significant increase in the speed with which data can be exchanged with Internet2 partner locations.

- **Imaging:** The Montana Guaranteed Student Loan Program (MGSLP), in partnership with the Montana Student Assistance Foundation, installed a new imaging system that allows for the maintenance of critical records in an electronic format. Employees that need access to a borrower student loan promissory note can retrieve it in seconds with a click of their mouse. The new system is able to store computer reports online so the reports no longer need to be printed in hard copy. Employees can search the report for pertinent information and review the summary page at will.

- University libraries are continually moving to a more robust electronic environment and utilizing Internet technology to improve access to information resources.

- The University System continues to be an active participant in the State's SummitNet, which is currently working to define and implement a dramatically improved and expanded statewide network to connect all campuses of the MUS and state agencies.

IT PROJECTS FOR FY02–03

- Web interfaces to the Banner System for student information and for faculty advising will be refined and expanded. Executive decision systems, likely supported by a single data warehouse system, will be implemented. Banner/Web for Student, Web for Employee, and Web for Faculty modules are being phased-in gradually in accord with needs on each of the campuses to avoid major disruptions in workflow.

- **Student Loan Processing:** The MGSLP's loan processing software has been enhanced to allow colleges to make changes to students' loan eligibility online. The agency contracts with an outside vendor for its software and is moving towards a web-based product. In conjunction with these changes the agency is also working with its vendor and the Department of Education to develop a web-based process for performing its reporting processes with the Department of Education on the web.

- Campus bookstores are developing web sites that will allow students to purchase books and material online.

IT STRATEGIC DIRECTIONS BEYOND FY03

- Implementing more direct student services via the web, such as access to services in Admissions, the Registrar's Office, and the Financial Aid and Business Offices.

- The campuses are in the preliminary stages of looking at e-commerce and the ability of the Banner system to electronically accept credit cards.

- The Montana University System will continue its commitment to providing more online classes, degrees, and services.

Commissioner of Political Practices

Information Provided by:
Dulcy Hubbert

http://www.state.mt.us/cpp

CURRENT IT PROJECTS

- Upgraded to Microsoft Office 2000.

- Working with a contracted programmer to build an Access internal reporting system. This system allows entry of periodic campaign finance reports into a database system and provides compilations of reports for the entire election cycle, which results in quicker response to public requests.

IT PROJECTS FOR FY02-03

- The Commissioner is developing a Request for Information to be submitted to vendors capable of developing electronic filing systems. It is anticipated this information will be available prior to the legislative session. An electronic filing and reporting system would allow candidates to enter required information online and would enable the Commissioner to disseminate this information to the public quickly and in a more efficient manner. Online submission also decreases the chance of data input errors. Individuals in remote locations as well as those outside the State of Montana will be able to access campaign finance information more readily.

- The Commissioner intends to continue to build other aspects of the web site and to provide more information online.

Consumer Counsel

Information Provided by:
Celia Farlan

http://www.leg.state.mt.us/consumer_counsel

IT STRATEGIES

The Internet continues to be important to the functions and activities of the MCC for the following reasons:

- notification from utility industry publications and groups about current national news, rulings, and legislation;
- ease of distribution of information between Montana utilities, MCC, and PSC in ongoing dockets; and
- connection to Westlaw database and other sources of regulatory case law.

CURRENT IT PROJECTS

- Routine updating of PC hardware and software.
- The Montana Consumer Counsel initiated a presence on the Legislative Branch home page that includes brief descriptive information about the agency. A comprehensive web site is still in MCC's long-range plan.

IT PROJECTS FOR FY02–03

- The Counsel hopes to establish continuity with storing electronic data received in regulatory matters and be in a position to integrate with the Public Service Commission's goal to receive electronic filings from all parties involved in their dockets.

Department of Corrections

Information Provided by:
Dan Chelini

http://www.state.mt.us/cor

IT STRATEGIES

The Department plans to improve connectivity, support, and the tool set (information systems) for field offices to allow department staff to accomplish our mission.

Montana Department of Corrections Mission:
"The Department of Corrections is dedicated to public safety and trust by holding adult and juvenile offenders accountable for their actions against victims through custody, supervision, treatment, work, restitution and skill development"

CURRENT IT PROJECTS

- The Department's file servers were upgraded and the network operating system software was converted to NetWare 5.0

- The campus-wide network at the Montana State Prison in Deer Lodge is near completion including connections to all housing units and most remote locations at MSP. The final phase is scheduled for completion by January 2000. This final phase will include connection of Maintenance, Warehouse, and Food Service operations to the State's network.

- New networks were designed and installed at the recently completed Pine Hills Youth Correctional Facility, and the Missoula and Billings Parole & Probation offices.

- Year 2000 remediation efforts included extensive programming changes to our legacy system ACIS and replacement of over 260 workstations to ensure reliable operation into the new year.

- The Resident Accounts and the Inmate Canteen Systems were replaced by a system purchased from Advanced Technologies Group in the fall of 1999. The new system allows the integration of inmate accounts functions and commissary functions. The new system also allows the department to deduct money from offender accounts to pay court ordered fines, statutorily required fees, or victim restitution. Prior to acquiring this system department staff had to make deductions by hand resulting in long hours and little results.

- The Department has also installed a Digital Mugshot and Employee Badge System at MSP, MWP, and the regional prisons. This technology assists correctional facility staff to identify and verify prisoners within facilities as well as those in transit. In the event of an escape, this technology

enables the correctional and justice systems to disseminate the inmate's photograph quicker and allows for a higher quality picture of the individual. The public's safety is increased with this system by improving the tools that public officers have at their disposal to identify and apprehend inmates.

- During the past biennium the Department made a decision to replace its legacy management information system (ACIS). To accomplish this the department is utilizing a sophisticated and powerful program-building tool called Cool Plex. Cool Plex greatly accelerates the rate at which programs are developed. The new system being developed is named PRO-Files. (Programmed Reporting of Offender Files) PRO-Files will be deployed in phases. Phase I is due for release during the summer of 2000. The first phase will include offender demographics, personal information, relationships, medical information, etc. Subsequent releases will include movement, classification, and disciplinary functions for adult and juvenile offenders.

- LiveScan Fingerprinting Analysis System is a joint venture between the Department of Corrections, the Department of Justice, and local law enforcement agencies. It is a good example of state agencies working together and coordinating with federal and county governments to put a common law enforcement computer system into operation at the national, state, and local levels.

  The system has been installed in different locations throughout Montana including the men's, women's, and regional prisons. Identical equipment has also been placed by the Department of Justice in many other locations around the state. The system will link with the Criminal History Records System at the Department of Justice, the FBI, and the Western Information Network (seven western states coordinating their fingerprint systems to better share information in the interest of public safety).

  Estimates show that, when fully operational, LiveScan will reduce the statewide fingerprint paper card volume by 70%. This shows the efficiency that the system will bring to many locations throughout the State. The system will also have a "Quick ID" feature that will allow the sending agency to determine if the individual held is a wanted fugitive before the fingerprint process is finished. This should greatly reduce the accidental or premature release of wanted persons before a proper criminal history and current court status check can be completed. It will enable law enforcement officers to perform the check on a multi-state and federal basis more quickly than the current Montana-only check can be performed.

- The Department has recently acquired a web server to meet the expanding needs of our corrections environment. This will allow department personnel to get information from the new PRO-Files system faster and easier than previously possible.

- Corrections is part of a pilot test of a Virtual Private Network (VPN) with the Department of Administration Information Services Division. Use of a VPN will allow higher quality and faster connections for over 20 department field staff. This VPN will also enable the Department to make more offender information than ever before available to local law enforcement.

IT PROJECTS FOR FY02-03

- The Department plans to install 13 additional servers in field offices across the state. These servers are needed to keep pace with the increased demand for services and support in the field that cannot continue with existing dial-up connections.

- We will also install additional T1 connections in several locations to alleviate the problems associated with increased network traffic over the last several years.

- Research the feasibility of using video conferencing to increase communications between the State's numerous prisons and to reduce the amount of travel required of department personnel.

- The goal of the Department is to continue to implement and use technology to create a single criminal justice system to best protect Montana's citizens.

IT STRATEGIC DIRECTIONS BEYOND FY03

The Department of Corrections is in the process of utilizing web technology to deploy many of our offender information reports. In the coming years we will be working with the Department of Administration, Information Services Division, to expand our use of this technology to offer increased access to more information to our staff and the public.

The Department also plans to utilize card scanners to facilitate our earned incentive program within our facilities. Our vision is that we will be able to allow or restrict an inmate's access to certain areas based on classification or privilege level.

Similar technology will be used for time and attendance reporting for department staff. We expect a time and attendance system will be more accurate and more efficient and provide better information for supervisors and managers.

The Department is undertaking a significant cultural change relative to data quality. Our management team has embraced the concept of "data stewardship." To help accomplish our goal of improving information quality we are exploring possibilities of centralizing offender records. We intend to improve connectivity and systems functions to allow either the physical or virtual centralization of records. This would allow better quality control and more standardization of information capture for all offender records. This concept is only under discussion and has not been planned for implementation yet.

Department of Environmental Quality

Information Provided by:
Rocky Brown

http://www.deq.state.mt.us

IT STRATEGIES

Our agency has adopted a Strategic Plan that is based on services provided, customer driven, supported by policies and procedures. There is also a section of the plan relative to hardware and software current or proposed with life cycles for each item. The primary goal of the Department is to have a web enabled enterprise database that will support management information and allow for accurate decision making for environmental actions. We have developed a strategy for ensuring that all legacy DOS databases are replaced by December 2001.

CURRENT IT PROJECTS

We have identified seventy odd IT projects either proposed or in actual work.

- Developed a system for prioritizing IT projects.
- Captured all current IT actions within the department.
- Procured Web Intranet server to support Web enabled applications.
- Facility Identification Template States designed–key of the enterprise.
- This is a system for defining all facility/sites by latitude and longitude within the State of Montana that are regulated entities of the department.
- Enterprise database core to be delivered July 31, 2000. This is the first piece of an integrated Oracle database called "the Enterprise". This is a one database/one application for all environmental disciplines, to replace our complete inventory of old, and in may cases, duplicated data elements for Air, Water, and Waste.
- Air system integration to the Enterprise, December 31st, 2000. The addition of the Air discipline by adding specific data elements, screens, and roles associated with their portion of the environment.
- Legal and Enforcement integration to the Enterprise–pending. This integration will accumulate as other programs are added to the Enterprise.
- Water, Asbestos, and Junk Vehicle integration to the Enterprise–pending.
- Upgrade servers to Novell 5.1
- Reorganization of IT resources within the Department.

- Safe Drinking Water system pending user acceptance and testing.
- STORET water quality system pending user acceptance and testing.
- Contracting module integration to the Enterprise–pending

IT PROJECTS FOR FY02–03

- Completion of Enterprise
- Metadata Project
- Customer accessibility through the Internet
- Electronic collection of environmental data
- Create a dynamic Web site utilizing a data sharing application interface to span multiple departments.
- Change over to Ethernet
- GIS development and data sharing between Federal and state entities.
- Office 2000 upgrade
- Windows 2000 upgrade

IT STRATEGIC DIRECTIONS BEYOND FY03

- Conversion of Oracle thick client applications to web enabled.
- Increase customer utilization of the web for reporting, complaints, environmental interaction for permits, licenses, etc.

Department of Fish, Wildlife, and Parks

Information Provided by:
Barney Benkelman

http://www.fwp.state.mt.us

IT STRATEGIES

Information Technology and internal IT projects allow FWP to conduct business in a fashion that would otherwise require a much larger FTE base. With many LANs spread around the state at regional headquarters, management of FWP's networks and participation within SummitNet is an ongoing challenge. Access to the Internet, and FWP's intranet by FWP employees is an agency priority. Currently underway is development of a state-wide automated licensing system–(ALS), which will allow online licensing to occur beginning in 2001 and, accurate and timely data to be captured for use within many FWP programs. FWP's use of it's award-winning website is growing at a tremendous pace, and will be expected to offer increased services and information to the public over time. FWP use of GIS has also been expanding and can be expected to be a part of FWP's IT projects far into the future.

CURRENT IT PROJECTS

- The Department's Internet web site has been in place for a couple years now. The site has received several national awards within natural resource agencies, and is one of the most visited sites in Montana State Government. Recent enhancements include access to the results of special license drawings, the ability to download applications, posting and receipt of certain surveys, and special interest areas similar to "chat rooms." FWP currently contracts for web related IT development, but is discussing the sharing of an FTE with another organization to supplement that effort.

- Network software continues to be upgraded to new levels of state standards (Novell NetWare), the desktop operating systems are currently moving towards Microsoft Windows 2000, and non-supported software (WordPerfect & Lotus) is being phased out, along with conversion of important files to Word and Excel.

- Oracle applications are being deployed to replace old legacy systems and to address other agency priorities.

- Interface and compatibility with other State software is an ongoing effort. With installations of SABHRS and MBARS, support staff is continually involved in support or upgrade activities.

- An additional regional "area office" was created in Lewistown. Enhanced networking in this office uses SummitNet for access to State services and additional offerings such as the Internet.

- The Department continues to work with both the State Library's NRIS personnel and the Department of Administration's GIS personnel to supply and obtain GIS information for use in the Department of Fish, Wildlife, & Parks mapping projects.

Ongoing Projects

- Development, testing, training, and deployment of an Automated Licensing System (ALS) is the largest IT project underway. The contract was awarded to MCI WorldCom, with subcontracting being handled locally by Wesco. This project will provide statewide online licensing by automation of the currently manual process of issuing licenses, capturing sportsman information, and collecting revenue. It will potentially expand the number of license selling agents in the state and could increase the number of locations throughout the state where individuals may purchase fishing and hunting licenses. At a minimum, it will expand the abilities of existing agents to allow issuing of any type of license at any location. Once in full production, the ALS will allow for submission of special applications from agent locations. Paperwork involved should be reduced and the selling agents should be able to reduce time and effort associated with selling licenses. This project will put point-of-sale technology in all agent locations throughout the State. Online capture of data will allow for a high degree of database integrity and improve survey practices and enforcement efforts. The ALS system will also provide licenses in a faster and more cost effective manner. With the use of EFT, this system should allow for faster collection of license monies due the state. Cooperative collaboration amongst many agencies (ISD, State Treasurer, etc.) is required for this system to be successful and effective. The system is currently expected to be in production by March 1, 2001.

IT PROJECTS FOR FY02–03

- Deployment of FWP's Automated Licensing System (ALS). This project involves three phases spreading across the upcoming biennium. Each phase must be tested, training must be conducted, outreach must be performed to keep customers informed, and technical and business requirements must be met. This project involves a great deal of collaboration amongst several state agencies (ISD, State Treasurer, etc.). This project plans on using EFT for revenue collection, and will eventually tie into the Internet.

- Further development of uses of Geographic Information System (GIS) technology.

- Access to, and use of, the State's new accounting system (SABHRS). In conjunction, this may require re-development of FWP's Budget Allocation System (BAS).

- Replace aged PC and mainframe programs and move older database systems to Oracle. This will provide stable and supportable platforms for agency priorities. In addition, field offices are gaining access to client-server applications that they previously could only access via a phone call to the central office.

- The Department hopes to expand use of the Internet, web-based applications, and FWP's website to deliver services to our customers.
- The Department may expand its use of area offices. Enhanced networking in these offices will use SummitNet for communications for State services and additional offerings, such as the Internet.
- The Department is also considering use of imaging systems to store records such as special license applications.

IT STRATEGIC DIRECTIONS BEYOND FY03

- Internet access for all appropriate FWP employees
- Further use of the FWP website to communicate with constituency groups
- Additional e-government options and offerings
- Online sale of permits/licenses
- Online application for permits/licenses

Office of the Governor

Information Provided by:
Mike Walsh

http://www.state.mt.us/governor/governor.htm

CURRENT IT PROJECTS

- Converted the Governor's Office server to Novell Netware 5.0.
- Updated the Office of Budget and Program Planning's web page to make it more users friendly.
- Developed a Budget Change Document (BCD) process using Microsoft Office to replace the budget modification (B212) process.

IT PROJECTS FOR FY02–03

The Budget Office plans to assist in the development of additional features for SABHRS and MBARS. Following are examples of additional enhancements or activities for MBARS that have been proposed:

- Comprehensive fiscal status system for "in session" tracking that will monitor revenue and expenditure effects of all legislative actions and the status of each bill with fiscal impact.
- Turn-around processing which entails detailed allocation of appropriations and FTE following legislative sessions.
- Budget modification (B212) process that occurs during the interim between legislative sessions.
- Supplement the reporting and analysis capabilities to monitor all appropriations, revenue estimates, FTE and related transactions.
- Capability to perform position control functions.

Historical Society

Information Provided by:
Sharon McCabe

http://www.his.state.mt.us

IT STRATEGIES

The Society cares for enormous collections of art, artifacts, historic photographs, books, and records about historic properties as a fundamental part of its mission.

- We are now aggressively looking for ways to create and maintain electronic databases for all our collections that are, to the extent appropriate, accessible over the Internet.

  Funding for specialized software for museum, library, and preservation collections has not been available in the state budget system. State-supported software is frequently inappropriate to our needs; nor can ISD support the software we need.

  Conversion of old paper copy or early electronic indices to new systems has proven a massive problem for which funding either from the state or private donors is difficult to secure.

- The Society has a strong educational mission. We use a newsletter, a magazine, conferences, and other public programs to carry out that mission. We have created a web page however would like to expand it if IT support can be obtained. An expanded state-of-the-art web page will assist us enormously in reaching more Montanans and visitors.

- Our continuing goal is to improve the Society's Information Technology in order to provide public access to our collections, meet education needs, and fulfill our mission through e-government and to improve our business practices through e-commerce.

CURRENT IT PROJECTS

- The Society microfilms materials for archival purposes. Because this technology is somewhat aged, the Society researches the capability of using imaging technology for the storage of documents.

- The Society continues to receive federal funds through electronic funds transfer (EFT) for a myriad of projects at the Museum in Helena.

- An aspect of electronic commerce the Society undertook the e-mailing of orders from the Society's catalog. This catalog currently resides on the Society's web site.

- The Society is converting the Preservation Office's antiquities database to Oracle. The Society received a variety of funds to make this system Year 2000 compliant and to add functionality to the system. This system is to maintain a State inventory of heritage properties (historic and archaeological sites) and paleontological remains such as dinosaur fossils and to assist the Society in charging companies (such as mining firms) for research performed on the company's behalf. This information is set up to operate between the State Historic Preservation Office, the paleontological section of the Museum of the Rockies, and the Anthropology Department of the University of Montana.

- Historical Preservation's imaging project– The Historic Preservation Office has contracted with ISD and Records Management for the scanning and storage of primary heritage properties documents (historic and archaeology). The preservation office plans to attach this to their existing Oracle database and allow agencies limited access via the Internet. The purpose of this project is to allow for the preservation of the original documents, many of which are over fifty years old and the only written record of the resource.

- The Society created a web site. At this site, visitors can view and order items from the Society's catalog by mail, phone, or fax, view information about the Society's programs, and view contact information for Society staff. We are looking to expand the site and eventually provide the ability to buy and pay for merchandise via this Internet site.

- The Museum Program researched and purchased Past Perfect cataloging software for the Museum collection. The program is currently entering all collections into the software. We are looking at networking between the Museum and Virginia City.

- The Museum Program researched and purchased VISTA software that can book tours, schedule footlockers and slide units, and generate the needed confirmation correspondence.

- Merchandise unit purchased Booklog software to manage sales and inventory.

- The Library now belongs to a worldwide online catalog of available books. Our ability to contribute to that effort depends on staff or contracts to enter the backlog of written card catalog entries.

- Archival holdings continue to be entered into a STAR system. Largest issue is cataloging of backlogged information. We are currently looking at expanding the ability of the Photo Archives.

IT PROJECTS FOR FY02-03

- Connecting museums throughout the State to the Historical Society office in Helena to share information about loans, museum items, collections, and exhibits.
- Expanding and rebuilding our Web site to provide information on current collections and allow visitors to query the information; provide the capability to receive payments via the site; and expand to provide our mission through e-government.
- Creating a system to coordinate the tour schedules between the Society, the Capitol Building, and the Old Governor's mansion.
- Creating a retailer system that would interface with PeopleSoft to maintain financial information.
- Expanding the Archive database to include Photograph Archives.
- Pulling Macintosh (publications program) users into the State system or replacing the Macintosh systems.
- Improving Information Technology at the Society to include staff training, an in-house IT support position, and ensuring all employees are networked via the state system.

IT STRATEGIC DIRECTIONS BEYOND FY03

- Insuring that all collections and catalog information, as appropriate, are available online, including online sale of historical publications and store items.
- Maintaining a web page that provides genuine full service to clients and interests others in history, including the educational aspects provided by the Society.
- Continuing the improvement of IT at the Society to ensure we are keeping abreast of all IT changes and upgrades to fulfill the mission of the Society.

INFORMATION PROVIDED BY:
PAT CHENOVICK

http://www.lawlibrary.state.mt.us

IT STRATEGIES

The Branch is using IT to provide services to court customers. Through the installation and updating of the Judicial Case Management System court users can get information on court cases through public access terminals. In the next year court information will be available through the central repository web page; thus, offering a new and convenient option to going to the courthouse. It is also being used to allow courts to operate more efficiently by allowing presentation of evidence items during trials electronically. This system will decrease the amount of time required to exhibit material during cases that have many items that have been introduced during the case. In the future IT will give the courts options to new and innovative methods to hold court.

CURRENT IT PROJECTS

- The Central Repository will be in operation the Fall of 2000. This repository will provide needed information to other departments including the Departments of Justice and Corrections. Information about child support orders to the Department of Public Health and Human Services, Child Support Enforcement Division, as required information by SB 374 is also supplied.

- Electronic court presentation systems are being installed in larger courts in the state. These systems allow electronic presentation of evidence items during trial.

- The Montana Judicial Branch is one of only five states having the same hardware and software platforms in all District Courts (for good communication among them). However, Montana is near the bottom of the list in the amount of expenditures for information technology.

- In FY01 the Courts of Limited Jurisdiction will be upgraded to a commercial software Case Management System that will allow court information to be added to the central case registry and to allow electronic submission of disposition information

- The Judicial Branch implemented several automation projects during the biennium including the automation of each of the 56 District Courts and 90 of the 150 Limited Jurisdiction Courts. Computer systems were installed in the 56 District Courts and each court was provided a single connection to SummitNet. In these courts, DOS based machines with word processing software were installed, and the Montana Judicial Case Management System (District Court) and the Montana Limited Judicial Case Management System (Limited Court) were installed. These offices include approximately 700 users.

- The Law Library is currently working on an imaging pilot project to have Supreme Court Cases available via the Library's webpage. This will allow users to see the actual brief that was filed on each case.

IT PROJECTS FOR FY02-03

- The continued support and growth of information technology by the Judicial Branch for the outlying District Courts will be contingent on the continuance of the $5 surcharge applied to court case filings. The surcharge was enacted by the 1995 Legislature through HB 176 and was reenacted in the 1999 Legislative Session. The Judiciary needs to continue to move the courts toward new technologies that include the following:
  - Electronic filing/submission of documents that will allow easier access for individuals to use their court system.
  - Imaging technology will aid in the retention of court records and the reduction of paperwork flowing through the court system.
  - Electronic courtroom that uses the "DOARS" system. This entails using electronic means in evidence presentation. This system significantly decreases the amount of time needed to try a case.
  - Electronic legal research can aid in every aspect of a court system, and would especially aid judges in the making of court decisions.
  - Public access to information and the opinions of the courts could be increased through electronic methods such as the Internet or a central database of court information that is publicly accessible.
  - Video arraignment and electronic conferencing are technologies that could be used in
  - Montana court systems to handle remote situations.
  - Court access to other District Court actions and judgments could be increased by the implementation of a central database repository into which every District Court would submit information. This repository would readily provide statewide information on district courts and limited court cases. This information is not currently available to the courts.

- Other topics the Judicial Branch will research are: a statewide calendar system to provide judges with information on District Court schedules, a statewide restitution system to provide courts information on individuals and restitution that is already being levied against the individuals, and a system to assist in the sharing of jury pools between local, district, and federal courts in the State.

IT STRATEGIC DIRECTIONS BEYOND FY03

- Online district court schedules and case information—this will allow judges, clerks, and attorney's the ability to check a judge's schedule via the web, as well as case information for any case statewide.

- Online court filing and payment—this will allow users to file proceedings and pay fees using computer technology.

- Online identification and information sharing for judges and criminal justice agencies—this will allow exchange of information via a web server for case specific information needed by judges and criminal justice entities

- New Limited Court Case Management System for connectivity to the District Court and Central Case Registry—his will allow case information to be moved electronically from Limited Court, to District Court, to Supreme Court, and to have case information on the central repository.

DEPARTMENT OF JUSTICE

INFORMATION PROVIDED BY:
JACKLEY STEAN

http://www.doj.state.mt.us

IT STRATEGIES

Continue using IT to effectively deliver services to the public, law enforcement and the Department. Refine existing IT applications and systems to improve efficiency and cost effectiveness.

The Justice Information Systems Division is working with a department-wide advisory committee to design a plan for expanding the services the Department delivers via the Web. The plan must provide a cost-effective and adaptable model that allows timely implementation of new technologies that meet the diverse needs of each division. The committee expects to identify a combination of in-house and contracted resources to meet the growing demand for Web-based applications.

Unlimited access to data on the State's mainframe is necessary to provide Motor Vehicle and Driver License application information to law enforcement. As we move into e-government and e-commerce, continuous access to data becomes even more imperative.

CURRENT IT PROJECTS

- The Montana Criminal Justice Information Services Project (MCJISP) uses various electronic systems to provide law enforcement and related agencies with a wide range of criminal history information. The Department receives background information on a person's criminal history from local agencies, including local law enforcement and the courts. The Department maintains this information and, upon request, provides it to those qualified under the law to receive it. The project is working in partnership with local criminal justice agencies, as well as other state and federal agencies. Linking information from various systems provides faster access to complete information about the criminal history records of people who commit crimes in Montana. For more information see **http:www.doj.state.mt.us/csp/mcjis.htm.**

- The Mobile Data Terminal Pilot Project consists of a five-car, prototype mobile data network to deliver selected Criminal Justice Information Network (CJIN) information to law enforcement vehicles. This pilot enabled the Department's Mobile Data Oversight Committee to produce the technical and operational specifications required for mobile access to CJIN. These specifications have had a significant impact on the Department's ability to deliver CJIN information to law enforcement officers.

- Due to various laws passed by the 1999 Legislative Session, many changes were, and are, being made to the Motor Vehicle Division (MVD) Title & Registration System. In particular, HB 540 places a flat vehicle taxation system on the ballot in November 2000, and creates two-year and perpetual registration periods. The various divisions within the Department and the County Motor Vehicle offices are redesigning the business processes and the existing Title & Registration System so they will be ready to make the necessary changes should voters approve the referendum, requiring substantial effort even before the election results are known.

- The Sexual and Violent Offender Registry (SVOR) program receives several requests daily for information regarding sexual and violent offenders. This information will be made available on a website. Using the Internet is a cost-effective way to provide this information to the general public.

- The Attorney General's Office has purchased off-the-shelf-software to track time and billing information for legal cases. The software will enhance the staff's ability to track and manage time, expenses and documents associated with clients and cases. As a result, the Attorney General's Office will be better able to manage it's growing caseload among existing staff, track documents filed in particular cases, and respond to requests for quantitative information about the types of cases it handles.

- The Department received a grant for a pilot project to integrate local law enforcement information from Lewis & Clark and Glacier Counties with the criminal justice information system. The pilot is designed to demonstrate the feasibility of providing more timely and accurate information on fingerprint identification, local arrests and booking and court dispositions through integration with the DOJ Criminal History Records System.

- The Department signed a contract with Polaroid to build a new digital driver license system that will provide images for driver licenses. The new system will allow better access to driver photographs by non-department personnel.

- In Fall 2000, the department will consolidate five division offices in Missoula into a single location to utilize shared resources. A LAN Manager located in Missoula will be responsible for the consolidated office and the Title and Registration Bureau in Deer Lodge.

- The Laboratory Information Management System (LIMS) is used by law enforcement and prosecution agencies. This system assists laboratory staff in case management, tracking evidence, logging evidence use, and summarizing evidence information. The system provides justice personnel with statistical information and documentation of evidence the laboratory receives.

- The FBI has completed initial phases of its National Crime Information Center (NCIC) 2000 project. This is a comprehensive improvement program for many of the criminal justice information systems to which Montana's CJIN System is connected. For more information see **http://www.fbi.gov/2000/2kv1n1.htm**

- The Livescan Fingerprinting Analysis System is a cooperative project between the Departments of Corrections and Justice to use the Automated Fingerprint Identification System (AFIS) software from the Western Information Network group. The information from this system will be used in several systems, including the State Criminal History Repository within the Department of Justice. For more information see the Department of Corrections.

- The Criminal History Improvement Project replaced the mainframe system with a new mid-tier, client-server based system, making the criminal history information more accessible. In addition, the Department added Sexual and Violent Offender Resource capabilities. The criminal records in this system are used by the criminal justice community in a number of critical areas: issuing weapons permits; determining criminal sentences; making background checks for public employment; making recommendations for parole and probation; and assisting prosecutors in criminal cases.

- The 1999 Legislature extended the Automated Lien Filing pilot. The pilot was created to connect financial institutions to the Title & Registration (T&R) System, giving financial institutions the ability to electronically file liens on vehicles more quickly and efficiently than they can under the largely manual process currently used. This year, the pilot will allow authorized bank and dealership partners to query information in the T&R System. Increased capabilities such as lien release, collateral liens, modifying existing liens, and new title liens will be added in FY01-03.

- The 1999 Legislature approved a dialup Automated Accounting and Reporting System (AARS) for video gambling machines throughout Montana. The system will have a central computer to communicate, through a modem, with each licensed video gambling machine every 24 hours to retrieve statistics and to check the integrity of the gambling device. The automated accounting and reporting system will improve the regulation, inspection and tax reporting requirements of video gambling machines.

- SB 76 requires that the Department collect Social Security Numbers (SSN) when people renew or apply for a drivers license. This process will implement a real-time check with the Social Security Administration (SSA) that verifies whether the name and date of birth match those on file with SSA for a given SSN.

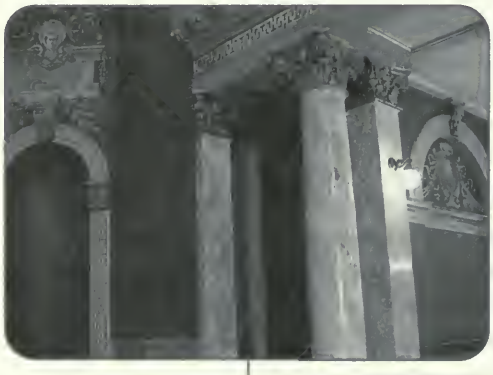
IT PROJECTS FOR FY02–03

- As a follow up to the LiveScan Fingerprinting Analysis System, the Department will link fingerprint information to additional state agency systems and federal government agency systems in an attempt to communicate information freely among law enforcement agencies across the country. This will further the Department's goal of working cooperatively with other criminal justice agencies to integrate systems and share information.

- Three Internet projects may occur during FY02–03. These are renewal of vehicle registrations, search for the availability of a personalized license plate, and determine the vehicle taxes and fees needed to pay for renewal of vehicles.

IT STRATEGIC DIRECTIONS BEYOND FY03

The Department hopes to implement a process to image vehicle titles, registrations and other information at the MVD Title and Registration Bureau in Deer Lodge. The current process of microfilming is outdated and inefficient. Finding film supplies and resources, and ensuring that titles, registrations and other information are filmed in a timely manner are becoming increasingly arduous.



Department of Labor and Industry

Information Provided by:
Dave Nagel

http://dli.state.mt.us/

IT STRATEGIES

The Department currently uses Information Technology (IT) to streamline internal business process to efficiently serve customers. When appropriate, the Department will continue to use as well as develop new online services such as the Montana Job Source (MJS) **http://jsd.dli.state.mt.us/mjshome.htm** to further increase customer service.

CURRENT IT PROJECTS

- Enhancements to the Montana Job Source (MJS). MJS is a website that accepts resumes of job seekers and job postings from private businesses, state, and education employers. It allows both employers and job seekers to conduct online searches for potential job candidates or job openings. The Montana Job Source replaces three computer job search systems. It enables individuals to search for job openings that fit their needs, enables employers to search for applicants with the skills they need, and allows individuals to apply for jobs online. Job Service is also able to enter job openings online and transfer them to America's Job Bank for listing nationally. This was a joint effort of the Job Service Division and the Department of Public Health and Human Services. The Department of Public Health and Human Services provided the funding.

- America's Job Bank is a national system that stores job bank information from all states including the State of Montana. The job bank information resides on an Oracle server in New York. Job orders and announcements are transferred to the national America's Job Bank system in nightly batch processes.

- The JobLINC Operating System is the new Workforce Investment Act (WIA) electronic system. The system will be available to all of the mandatory partners and associate partners in the WIA system. The partners consist of state agencies and non-profit organizations that provide training services to enrolled applicants. The system will help reduce duplication of information and services among all of the partners. This system will include a self-service module for applicants and employers. This will be coordinated with the Montana Job Source to prevent duplication.

- Create or purchase two new electronic programs that are mandated in the WIA. The first program is the Eligible Training Provider List. This is a program that will provide all partners with access to a list of training providers and their report card of performance. Annually, all training providers who did not perform within the minimum standards will be removed from the list. The second program will be the Performance, Accountability, and Consumer Report

System. This is a system that will roll-up all of the WIA performance from the partners who receive WIA funds. WIA requires one report to the federal government from each state. The Eligible Training Provider List should be completed by 9/30/00 and the Performance reporting system will be started in 2000 but may not be completed until June of 2001.

- The Case Tracking System (CAT) assists the Department in following cases throughout divisions and systems. There are multiple systems throughout the Department for different functions, and thus, there exists a need for a management system to connect these systems and reconcile record information. Time will be saved and hearings expedited because of the coordination of these systems.

- Limited SABHRS interfaces are being completed.

- The Unemployment Insurance claims intake process was incorporated into two telephone centers, which allow claimants to file their claims by telephone rather than by driving to a local office. This process change included the development of an electronic document system.

- The Department used federal workforce development grants to set up development centers throughout the State. These centers were provided with joint case management systems to warehouse information from vocational rehabilitation, welfare, unemployment insurance, and union centers.

- The Department of Revenue through POINTS absorbed the responsibility for employee benefits system contributions. The wage and charging processes of employee benefits were retained and incorporated into the new Montana Integrated System To Improve Customer Service (MISTICS) System that is able to share data with Revenue's POINTS. Development of MISTICS began during the 1998-1999 biennium and will be finished this biennium.

- This Oracle database system is a rewrite of the Unemployment Insurance Benefits System. It will aid the Department staff in every aspect of unemployment filing from claim input to producing benefit checks for the unemployed. The information produced in this system will then be electronically transferred to Job Service's systems.

- The Department encouraged insurers to transfer information to the Department through electronic data interchange (EDI) technology. This information is automatically stored in the Workers' Compensation Automation Project (WCAP) that tracks the history of worker's compensation within the State. Insurers are taking advantage of this technology. This EDI system reduced staff time for entry of information, and provide more accurate and timely information to WCAP.

- On going enhancements to the JobLINC System to customize it for our state needs.

IT PROJECTS FOR FY02-03

- The Department is very involved in the proposal to create a centralized imaging service with the Department of Administration and play an active role in the ITMC Imaging Subcommittee. For more information, see Imaging.

- In this biennium, the Department will perform numerous maintenance tasks on systems and will research adding the ability to access the MISTICS system from the Internet and to provide information to it through electronic means (EDI). The Department will be looking into adding an interface to the Montana Job Source System that would allow the electronic transfer of job applications to America's Job Bank. The Department will be making additions to several systems to provide them with an Internet interface.

- Completion of the Performance, Accountability, and Consumer Report system if it is not completed in the current biennium.

- On going enhancements to the JobLINC System to customize it for our state needs.

- Electronic Data Interchange (EDI) will be further broadened within the Department under the Worker's Compensation Automation Project (WCAP). The Medical and Legal Cost Modules will allow insures to report expenses and legal costs electronically. These additional EDI systems will help reduce staff time for entering the information, and provided more accurate and timely information to WCAP.

- The Department will be converting the Contractor Registration (CR) program to be Internet based. Currently, contractors mail or hand deliver their appropriate forms as well as pay fees when becoming registered contractors. Converting this system to the Internet will allow contractors to register and pay fees online. In addition, instead of the public reading down a long list online, they will be able to electronically search online to find if a potentially employed contractor is registered.

IT STRATEGIC DIRECTIONS BEYOND FY03

- Electronic transfer of unemployment funds to recipients

- JobLinc will provide training information as well as all Labor exchange activities.

Legislative Branch

Information Provided by:
Hank Trenk

http://www.leg.state.mt.us

IT STRATEGY

The Legislative Branch plans to continue to use IT to help in the collection, analysis, and dissemination of information. The Internet will be used as a key technology in this effort. Riding on the success of LAWS (Legislative Automated Workflow System), the Legislative Branch is making plans to put even more of the Branch's data on the Internet. An example of this is the broadcast of the daily floor session and selected committee hearings on the Internet as well as the ability to view previously recorded floor sessions/hearings. Another example is the use of Web technology to manage the knowledge that the Branch currently has stored in electronic form. The Branch plans to migrate its electronic data toward an Intranet/Internet environment so that currently stored knowledge can be readily found instead of recreated. The Branch also plans to take a step toward automation of the job of the legislators by conducting a pilot for the 2003 session. This pilot will provide laptops for 18 legislators. The Branch is also planning projects to access more of the information it needs to audit and fiscally analyze administrative, financial and revenue systems in state government and the university system.

CURRENT IT PROJECTS

- Because of Capitol renovation, the Legislative Branch had to move out of the Capitol building to temporary quarters in the Federal and Steamboat buildings. Increased IT support has been required to move all of the computers, printers and servers to their new location and set them up. With the move back to the Capitol, the Branch is converting from Token-ring to Ethernet networks. This also has required additional IT effort to setup this environment.

- The Branch is in the process of purchasing, installing, and receiving training on a GIS (Geographic Information System) to support the districting and apportionment effort that must be performed every 10 years.

- The Legislative Branch is responsible for fiscal analysis and audit of state and university administrative, financial, and revenue systems. With the recent upgrades to state and university system administrative, financial, and revenue systems, the Branch had to rewrite its reporting interfaces to these systems. The Branch currently has projects under way to gain back functionality that it had with the old version of these systems. In particular, the Branch is working on projects for the Audit and Fiscal Divisions to interface to the new SABHRS system.

- The Branch put a significant amount of time and effort into ensuring that all computer systems were Year 2000 compliant. An inventory of all equipment and software was completed. Each item on the inventory was checked to determine if it was compliant. If the item was not compliant, it was fixed or replaced.

- Last biennium, the Branch implemented the LAWS system. The 1999 session was the first time this system was used. There were a few minor bugs identified and several enhancements proposed by the users. The Branch is currently working on implementing the most requested fixes and enhancements. Among these are, access to votes by clicking on the bill status motion for the vote, ability to print out a bill with line numbers for the purpose of writing or interpreting an amendment, streamlining the process of signing up for a preference list, and improvements in assignment of bills to a preference list.

- Because of inefficiencies in the user interface to the Information Request System, the Branch is rewriting this system to use a web browser interface. Another key enhancement being added during this rewrite is the ability to automatically e-mail a staff person once that person has been assigned a request on the system.

- The Branch is in the process of converting its Network Operating system from NetWare 4.1 to NetWare 5. The main feature of NetWare 5 is its ability to use Internet Protocol instead of Internetworking Packet Exchange protocol. Another feature of NetWare 5 is the ability to more easily support the network through enhanced network administrative tools.

- The Branch is conducting preliminary planning for the conversion of its main PC operating system to Windows 2000. A few pilots will be conducted to determine the resources and effort necessary for this conversion.

- Last biennium, the Branch worked in conjunction with the Office of Budget and Program Planning (OBPP) to develop and implement a statewide budgeting system for use by both the Executive and Legislative Branches. This system is called the Montana Budgeting and Reporting System (MBARS). This biennium, the Branch and OBPP have worked together on several enhancements to the system. These enhancements include reducing the time needed to update narrative data, changing the interface from SBAS to SABHRS, and improving the reporting capabilities.

- The Branch has recently implemented a major redesign of its web site. A standard look and feel has been implemented across all parts of the site. A major effort has been made to keep the web site updated with all the information necessary to track interim committee activities.

IT PROJECTS FOR FY02-03

- Maintain the operational status of the current computer environment—Included in this is: continue to upgrade software packages to supported releases, continue to phase out and replace old and obsolete hardware, maintain current application systems, convert to Windows 2000, convert LAWS to WordPerfect 9, finish the Information Request System rewrite, and reapportionment system support.

- Streamlining the Web Publication Process—The Branch currently contracts for all of its Web server services. This initiative would bring this service in-house. The Branch would then have better control of its Web servers and have the ability to better streamline the process needed to keep the information up to date and relevant.

- Interface to Enterprise Systems—This initiative is to help the Branch obtain the data it needs from the new administrative, financial, and revenue systems recently put in place by the Executive Branch and the University System. The Branch needs this data to perform its function of audit and fiscal analysis. The key systems the Branch needs data from are SABHRS, POINTS, and BANNERS.

- Internet Broadcast of Session Activities—With the addition of cameras in the House and Senate Chambers and certain committee rooms, the Branch needs a way to provide this audio and video to the public. Under this initiative, the Internet would be used to broadcast this data live and to offer the ability to view previously recorded floor sessions.

- Geographic Information System—This initiative is to begin to enhance the Branch's ability to analyze geographical (spatially related) data and present the analysis in map form. For example, instead of presenting a table of average income by county or Legislative District, a map of each county or each legislative district could be produced showing this information.

- Legislator Automation—This initiative is to take a step toward automating the job of the individual Legislator. The Branch will conduct a pilot of 18 laptops for legislators to use during the 2003 Legislative Session. This pilot will help determine if this technology can help the legislator in performing their job.

IT STRATEGIC DIRECTION BEYOND FY03

- The main product of the Legislative Branch is information, i.e. bills/laws, status of bills, budgets, study reports, audit reports, etc. Technology is the primary tool used by the legislature to collect, analyze, and disseminate information.

- The Legislative Branch has a two part vision for the use of IT: 1) To provide for the efficient, timely, and effective operation of the business of the Legislative Branch in order to support its various functions and 2) to continually apply and improve IT to help minimize impediments to the collection analysis and dissemination of public policy information to all interested parties.

Department of Livestock

Information Provided by:
Kathy James

http://www.liv.state.mt.us/

IT STRATEGIES

The Department of Livestock's mission is to prevent, control, and eradicate animal diseases; prevent the transmission of animal diseases to humans; protect livestock industries from theft and predatory animals; assure clean, wholesome, and properly-labeled meat and poultry products; and regulate and inspect the milk industry. This mission will be accomplished with the aid of technology to provide accurate and efficient data maintenance, retrieval, reporting, and electronic access of information to the public and to remote Department employees.

- To provide efficient means to test, diagnose, track, research and report animal diseases
- To improve electronic information retrieval capabilities of the Montana Brands System for recording of brands
- To provide electronic information retrieval of Department inspection and licensing information to remote offices and employees
- To continually strive toward automation processes that improve the efficiency of service provided to the public and the livestock industry

CURRENT IT PROJECTS

- The Department is in the process of implementing unique bar codes for the 2001 Brand Rerecord. The bar codes will be printed on rerecord renewal notices that will be sent to over 75,000 recorded brand owners in December of 2000. This implementation will provide an avenue for brand owners to use the Department's website to enter a unique identifier and see if their renewal has been received in the Helena office. Brand owners will also have the option to call the Helena office directly and Department staff will be able to lookup the information using the brand owner's unique identifier. This capability will cut down on the number of phone calls received in the Helena office and will provide a new service to brand owners that was not available in past rerecord years.
- The Department implemented an intranet for Department of Livestock employees, to provide internal information on items such as Department activities, scheduled events, and press releases to reduce paper and mailing costs. The Intranet is available to Helena and Bozeman office employees, several remote employees, and will soon be available to the 15 Brand Offices located across the state.

- The Department, in cooperation with the Food Safety and Inspection Service (FSIS), is implementing a Field Automation and Information Management (FAIM) program for state meat and poultry inspection. Part of this implementation was the purchase of portable laptop computers to be used by state meat and poultry inspectors to send and receive inspection information electronically with FSIS. This state FAIM project, which first began implementation in 1999, is part of President Clinton's Food Safety Initiative.

- The Department continues to work on migrating in-house legacy DOS applications and systems to an Oracle platform.

IT PROJECTS FOR FY02-03

- The Department will implement a system on the web to display available brands. This will provide the ability for the public to view available brands and submit a brand application online to the Department Brand Recorder for review and approval. Currently, the public must come to the Helena office to view available brands in a hard-copy report format and submit a brand application at the Helena office or submit one by mail.

- The Department will implement a new Laboratory Information Management System (LIMS) at the Veterinary Diagnostic Laboratory in Bozeman. The LIMS will replace a legacy DOS-based system and provide better information retrieval and reporting of animal disease testing and diagnoses. The new LIMS will interface with various laboratory testing equipment to send test result data directly to the LIMS.

- The Department plans to add an Information Systems Specialist position at the Veterinary Diagnostic Laboratory in Bozeman. This position will implement the new LIMS, provide microcomputer support to the Diagnostic Laboratory and 15 remote Brand Offices, provide Oracle application development, and provide network administration for the Bozeman local area network. This position will eliminate increasing workload of Helena support staff and allow more time for needed Oracle migration development.

IT STRATEGIC DIRECTIONS BEYOND FY03

- The Department plans to do an analysis of the Montana Brands System on the mainframe to potentially move the system to an Oracle platform if cost effective. Several other features like an electronic "brand bible" and an interfaced information system that tracks shipper, brand owner, and buyer information will be considered for implementation that will improve productivity for the 15 remote Brand Offices using the system.

- Other areas of IT direction include an analysis of current licensing or permitting services that could be provided to the public and the livestock industry via the web.

Department of Military Affairs

Information Provided by:
Homer Young

http://www.state.mt.us/dma

IT STRATEGIES

The Department will continue to utilize IT to streamline processes in order to provide and maintain efficient emergency responsiveness.

CURRENT IT PROJECTS

The Department is currentiy upgrading the agency's server (DMA_ADM_001) to keep pace with information technology and make the server capable of handling user demand, new Microsoft Office 2000 software, and the new requirements for SABHRS, MBARS, and HR programs.

IT PROJECTS FOR FY02-03

The Department will be installing a new server and converting the local area network to Ethernet technology in conjunction with the move to the new state addition to the AFRC building at Fort Harrison. We will expand our LAN capabilities to support the Emergency Operations Center.

Montana Arts Council

Information Provided by:
Carleen Layne

http://www.state.mt.us/art

IT STRATEGIES

The goal of the Montana Arts Council is to promote the arts in Montana, and agency technology strategies to accomplish this mission include:

- Maintain and consistently grow in number and sophistication a inter-relational database of artists, arts educators, arts organizations, arts Board of Directors members, that also tracks grant and service history to the database.
- Utilize database internally, but also make it available with a variety of sort options, to the general public (releasing only those names from whom we have permission.)
- Develop on-line grant application capability that ties entries on forms directly into database.
- Develop on-line calendar list entries by the public for inclusion in the agency newsletter "State of the Arts."
- Continue and expand telecommuting policy for staff.
- Continue to expand the sophistication and usability of agency website.

CURRENT IT PROJECTS

- The Montana Arts Council rewrote their main database containing grant information. This database helps the Council manage their multiple grants program, manage their mailing lists, and maintain a history of grant accounts. Because of this rewrite, the Council was able to provide detailed reports to the public on the Internet, and was able to easily keep these reports current. The above was the initial goal, but waiting 18 months on a contractor who would/could not produce forced us to start over with a new database developer around the beginning of 2000. The mailing list portion of the project is fairly well in place and the grants management aspect is currently being worked on. This project is projected to be accomplished by mid-2000. The final product will allow the agency to use the database for Internet purposes as well, as noted below in the future IT projects.
- Installed an NT network in the office.
- Simplified grant applications.
- Scanned segments of typed grant applications to create electronic documents.

- Created an online artists registry to provide information on artists who are available to perform programs in schools.

IT PROJECTS FOR FY02–03

The Council will continue to simplify and streamline their business processes and requirements through the next biennium. Also, they will disseminate grant applications through their web site.

The agency conducted a strategic planning session for 2001-06 and identified two major areas of focus for that period, Arts Education and Economic Development. Implementation of strategic planning initiatives will depend on funding not currently in place. The agency will investigate collaborating with other agencies to implement as much of the strategic plan as possible. The following is a listing of tactics for each of the major areas:

Arts Education:

- Use the Internet to create partnerships in three communities over five years to develop "virtual artist residencies."
- Develop and implement a marketing plan that includes publicity materials, enhanced website resources, and media.
- Encourage Montana arts and folk arts website use as art and literature teaching resources.
- Organize three teacher institutes for inclusion of technology in the arts.

Economic Development:

- Provide resource ideas and audience development approaches that have proven successful in other places. Assist in publishing a listing of arts venues and specs on the web.
- Establish a resource directory of community development funding/assistance and other resources from city/state/and federal government and other applicable major foundation and corporate funding for artists and the arts in Montana. Publish both on the web and in hard copy.
- Use the MAC website as an important technical assistance tool through creation of or linking to "business of the arts" tools/seminars/articles/resources. Include how to develop marketing plans for the web for artists, as well as sample marketing plans, sample contracts, and technical riders.
- Due to extraordinary demand, increase eight-fold the Montana Arts Council's technical assistance program budget funded through the state. Help artists and arts organizations develop

stronger artistic, business, marketing, technological (computer), and fund raising skills through technical assistance services and grant funding. This includes putting the newsletter on the Internet.

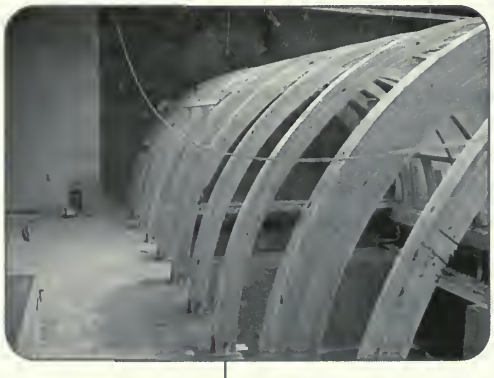
- Advertise Montana's artists/events/arts scene nationally in targeted publications and on the web.

- Investigate and implement utilizing the above resource databank of artists and arts organizations to develop an e-commerce niche, whereby not only would the Arts Council be the resource to find artists or arts groups, but its website registry could also be a resource for selling artists' work. Commissions on those sales, membership fees or work exchanges could help finance this site and perhaps fund other promotion efforts. The agency will also engage and support existing private-sector enterprises in this area.

- Acquire appropriate technology and ensure database capabilities are able to handle substantial needs.

IT STRATEGIC DIRECTIONS BEYOND FY03

The above listing addresses the agency's strategic directions through 2006.



Department of Natural Resources and Conservation (DNRC)

Information Provided by:
Bob Auer

http://www.dnrc.state.mt.us

IT STRATEGIES

Current agency imperatives include computer training; adapting to the Statewide Accounting, Budgeting, and Human Resources System (SABHRS); managing computer software and hardware; improving data communications; managing major software systems; managing natural resources using geographic information systems (GIS); and fully utilizing the DNRC web site.

Nearly all of the department's business is performed using computers. Training on the use of these systems is a must. Computer hardware and software is an issue within the department in terms of standards and replacement cycles. Data communications is an area where DNRC must attempt to gain as much efficiency as possible due to our decentralized structure. Currently, DNRC's major software systems are undergoing major changes. DNRC must be careful that the end products from these changes meet the department's needs. DNRC is experiencing tremendous growth in the GIS arena—projects and programs need to be managed carefully. More and more demands will be placed on DNRC's website. Managing this resource will become a major task.

CURRENT IT PROJECTS

- Computer Training. DNRC needs to develop computer-training resources and procedures. Much of the current absence of training can be attributed to the lack of training programs and training facilities. DNRC's strategy does not advocate legislative funding for department-wide training. Each division is in a much better position to determine training costs based on past expenses and expected employee turnover. The DNRC strategy is to provide guidance for developing training programs within department business programs and provides support for the divisions in seeking funding for training.

- SABHRS. The SABHRS module for budget development went into use in March 1998, the asset management module in September 1998, the human resources module in April 1999, and the SABHRS general ledger module became active in July 1999.

  Many problems were encountered with the SABHRS modules in the initial rollout. Currently, the problems with the modules are more specific in nature. One major difficulty DNRC is having with SABHRS is the lack of reports on personal services expenditures.

- Computer Hardware and Software. The DNRC strategy is to look ahead at the requirements of expected software upgrades to guide us in our hardware purchases. Currently, we can look to future versions of Microsoft Windows and Microsoft Office for hardware specifications. Microsoft Office 2000 and Windows 2000 have both been released in the early part of 2000. The state will migrate to both of these software packages to keep current on Microsoft products.

- Data Communications. Computer networks have proven to be an indispensable use of technology in business and government. Network users can share data and resources and communicate in highly effective and efficient ways. Users in networked DNRC offices continually comment on how this technology has improved their productivity, their ability to communicate, and their attitude toward work.

  The DNRC strategy is to network offices whenever the need presents itself. Networking a field office first involves installing a local area network (LAN) at the office. The LAN connects the office computers and printers. This step provides software and data sharing from a common file server. Also, any printers are accessible to all users. Once the LAN is in place, the office can then be connected to the state's wide-area network, SummitNet. This step provides e-mail, SABHRS access, mainframe access, Internet access, and access to data on any file server on SummitNet.

- Major Software Systems. All of the department's large software systems were developed before personal computers and personal computer networks had the capabilities they possess today. Our large systems–water rights, trust land management, oil and gas, and fire protection–were developed to reside on the mainframe platform, which was state-of-the-art 10 to 20 years ago.

  A database redesign objective was originally presented in the 1998 *DNRC IT Plan*. Since that time, this objective has received overwhelming support. Work is currently underway to migrate all of our mainframe-based systems to other platforms. The various development teams are working with each other to ensure agency-wide consistency and integration.

- Managing Natural Resources Using GIS. DNRC GIS objectives are consistent with overall DNRC IT objectives. The large DNRC databases need to be redesigned into a GIS-ready format and, as part of the database redesign, the data structure in the databases must allow integration between the databases. GIS applications can then be built over live, production data.

  Work on the Department of Administration's cadastral mapping project is ongoing. This project will create a GIS database of all land ownership in Montana, including trust lands. Since this is an all-inclusive, land-mapping project, care must be taken not to duplicate the efforts of the cadastral project within DNRC. It is expected that this project will include state-owned surface lands. It is not expected to include mineral or riverbed ownership, which are data elements that are essential to the management of state-owned lands.

- DNRC Web Presence. Currently, DNRC's website offers a wide range of information about the agency. For the next several years, DNRC will continue to add agency information and forms for downloading.

  Greater consistency in website design is needed throughout our pages. Division webmasters met in January 2000 to coordinate with each other and with the department webmaster to arrive at common elements and a consistent look and feel to the entire DNRC web area. The coordination process is ongoing.

IT PROJECTS FOR FY02-03

Geographic Information Systems (GIS) information is a very efficient means to represent natural resource information. In the coming biennium, the Department will be doing a great deal of GIS work.

- **Forested Lands.** The Forest Management Bureau has been heavily involved in GIS work for the past 10 years. GIS is being used by the field offices for timber harvest analysis, hydrology assessment, wildlife habitat identification, old growth management, stand level inventory, establishment of effective patch sizes, and location of roads and structures. In about two and one-half years, all of DNRC's forestland in the western part of the state will be digitized and in the GIS.

- **Non-Forested Lands.** Although not required today on agricultural and grazing lands, GIS uses are anticipated. Some potential agricultural and grazing uses are land use, soil types, recreational access, wildlife habitat, cultural sites, commodity types, and animal types. Potential subsurface mapping and analysis could be done for subsurface ownership, mineral reserves, oil and gas drilling locations, and geologic data.

- **Water Resources.** The Water Resources Division is currently designing and preparing a migration of the water rights database from a mainframe environment to a tabular, object-oriented database. To link the GIS spatial data to the tabular database, water-related data conversions will need to take place, which will also accommodate historical data preservation.

- **Fire and Aviation Management Bureau.** The Fire and Aviation Management Bureau maintains a mainframe database on fire protection assessments (FPA). This data is used to record land parcels for which the bureau provides fire protection. These tracts of land are the bureau's fire protection boundaries. A GIS system that could graphically represent these boundaries would be of value to determine responsibilities for fire suppression, determine suppression

strategy, locate structures and water sources, and aid in dispatch. The GIS data could be shared with other emergency service entities and contribute to statewide emergency services GIS applications.

- **Oil and Gas Conservation Division.** The Oil and Gas Conservation Division has a large collection of information on oil and natural gas drilling and production, regulatory requirements, and underground injection associated with oil and gas activities, the majority of which can be displayed spatially. This data can be utilized in many potential GIS applications of interest to other governmental entities and the public.

Office of Public Instruction

Information Provided by:
Scott Buswell

http://www.metnet.state.mt.us

IT STRATEGIES

OPI has been working to develop a WEB presence and to functionally use the WEB to perform business operations. Over the past year several WEB applications have been developed including a new interface for the Montana Automated Education Finance and Information Reporting System (MAEFAIRS), The School Food and School Lunch Programs, Teacher Job Applications and Job Search. In addition OPI continues to look at Citrix Metaframe as a possible solution to the problem of electronically communicating large applications with our rural schools

CURRENT IT PROJECTS

- The Office of Public Instruction provides services to the Legislative Services Division in the form of Web hosting of all legislative bills. OPI ensures security as well as backup/disaster recovery for those files. OPI also maintains a development server that is available to Legislative Services for the design of future interactive (ASP) web pages.

- OPI maintains a **Teacher Placement Service**, located at **http://JobsForTeachers.opi.state.mt.us/**, which serves as a job-posting registry for Montana's K-12 schools. This service also acts as a ListServ for over 950 subscribers.

- OPI is currently developing an electronic **Universal Education Employment Application** for Montana K-12 schools. This web-based form will allow potential job applicants to complete and submit their completed application to school districts electronically.

- OPI maintains the State of Montana's **NewsLinks** page in cooperation with the Governor's Office at **http://NewsLinks.state.mt.us/**. Public Relations personnel in various state agencies can e-mail to this service, which in turn sends e-mail to participating news agencies and the interested public.

- Each fall, Montana's 900 public schools and accredited non-public schools complete the **Fall Report** consisting of information on school personnel and teaching assignments, district information, accreditation information, dropout data, and student assessment scores. County superintendents and private schools report non-public school enrollment within this system. OPI is developing an automated system with built-in calculations and edit checks that will help avoid reporting errors and reduce the time spent by OPI and school district staff correcting incomplete data and errors. For the fall of 2000, 75 school districts have volunteered to participate in a pilot project to automate the reporting of non-fiscal data.

- The **Federal Consolidated Allocations** project provides a defined, documented, and audit capable process for generating and recording annual allocations for all participating public and non-public schools. This year the work effort will be to provide schools and the community up-to-date information, and an electronic application that schools can use to submit their annual applications electronically. It will be user-friendly and tie into the SAHBRS accounting system to display current approved budgets, expenditures, and final project status.

- The **School Food Internet** application provides Montana Schools with an integrated, Internet-based system for submitting new agreement applications (or renewals or updates) for timely and correct payments of school lunch, breakfast, snack, and special milk claims. The application allows OPI staff to easily manage the reimbursements, payment, and reporting needs of the program. The important business process will be documented through a user and operator's manual in FY2001. The Cooperative Bid program provides combined buying power for schools to purchase food. The system will be placed in production July 1, 2000. In FY2001, the commodities distribution program will be rewritten to update it from FoxPro to Microsoft Access.

- The **Montana Automated Education Financial and Information Reporting System** (MAEFAIRS) system is a key component in collecting and reporting school district enrollment, budget, and expenditure reports. This important information is used throughout OPI and in the Legislature for the determination of school funding allocations. A new MAEFAIRS upgrade will be implemented in September 2000. The updated MAEFAIRS system utilizes the Internet in transferring data between School District Clerks and OPI.

- The **Traffic Education** program will go into production in July of 2000. The program that keeps track of certification and records for the traffic education instructors was rewritten to make is easier to use and more efficient. Transportation programs will be rewritten from FoxPro to Access 2000.

- The **Special Education** division continues to progress through the conversion and development of their systems from FoxPro to Access and to incorporate Internet strategies in the collection and dissemination of statewide special education data. The Maintenance of Effort application, Special Education Allocation programs, and Child Count programs are slated for development in the next year.

- Beyond the systems development projects listed above, OPI continues to maintain its personal computer network and meet state network standards. OPI network staff continues to work on upgrading hardware, software, and network wiring to ensure that OPI is compatible with Executive Legislative Branch agencies and schools. In addition the network staff work in conjunction with systems development and Internet staff to ensure that OPI applications operate in an efficient, secure and backed up environment.

IT PROJECTS FOR FY02-03

- OPI will improve and maintain its automated systems for the reporting of fiscal and non-fiscal data. These systems provide the core data for 1) the distribution of approximately $500 million to 450 school districts, and 2) the annual accreditation of 900 K-12 schools.

- OPI will concentrate on moving more applications to the Internet either through the use of direct applications programming, or through the use of Citrix where bandwidth considerations prevent us from effectively using interactive applications coding.

- Research allowing teachers to re-certify through the Internet and to electronically transfer re-certification fees to the State.

- Research disseminating and collecting more information electronically using the Internet and WEB/BBS hybrid systems to ensure equitable access for all users.

- Research ways of providing more bandwidth to schools or seeking alternative means of providing affordable electronic access to rural schools.

- In partnership with the Northwest Educational Technology Consortium (six states in the Northwest and Northwest Regional Education Labs), the Office will continue to investigate the feasibility of providing and integrating two way video capabilities in Montana's rural classrooms.

IT STRATEGIC DIRECTIONS BEYOND FY03

OPI will continue to look toward technology solutions to manage the business of education in the state. The physical size of the state, the number of school districts, and the number of schools in the state continue to provide a management challenge to the Office of Public Instruction. As technology innovations appear in the industry, OPI will monitor those changes to determine if problem-solving applications are developed which may benefit K-12 education in the state.

Department of Public Health and Human Services

Information Provided: by Dewey Barnes

http://www.dphhs.state.mt.us

IT STRATEGIES

The Department of Public Health and Human Services takes pride in maintaining up-to-date knowledge on the latest information technology. As new capabilities evolve, we review the functions performed by the department to assess the feasibility of utilizing new technology to enhance performance within these functions. System equipment and applications are upgraded on a regular basis, within budgetary constraints, to maximize efficiency, productivity and data accuracy. At present, we are shifting toward greater use of diverse client server systems and use of expanded Internet capabilities. This is an ongoing process to keep the Department at the forefront of technological progress.

CURRENT IT PROJECTS

Health Policy and Services Division

- The Health Policy and Services Division had a re-procurement for a new Decision Support System (DSS) in 1999. The MEDSTAT Group was chosen as the contractor and will implement the "Advantage Suite" Decision Support System in August 2000. Advantage Suite Decision Analyst couples healthcare applications and methods with an Oracle-based query engine, an intuitive graphical user interface, and a Measures Catalog. For HEDIS reporting, Medstat will use Performance Workstation. For executive information purposes, Advantage Suite also includes an information dissemination tool called NetEffect. It is a Web-browser Executive Information System tool that presents pre-run reports for quick and easy views of summary information. NetEffect delivers an array of Advantage Suite reports that are tailored to meet the unique needs of the Department.

- In 1996 Congress passed Public Law 104-191, the Health Insurance Portability and Accountability Act (HIPAA). Title II, Subtitle F, Part C, Administrative Simplification will have a huge impact on Medicaid and the Medicaid Management Information System (MMIS). Administrative Simplification mandates electronic formats for health claims, health claim attachments, enrollment, and disenrollment, and eligibility, and well as mandating standard identifiers, standard code sets, security standards, and privacy standards. The Department will begin requirements analysis in the fall of 2000, and begin coding no later than March 2001. The first set of required HIPAA standards must be implemented two years after the final rule is published, and the final rule is expected to be published June 2000 month-end. The rules will address Standard Electronic Claims Submission and Standard Electronic Explanation of Benefits.

- In 1999 the Department contracted with Consultec, Inc. to design and develop a Drug Rebate Analysis/Management System (DRAMS). The processes involved in the drug rebate program center around the quarterly production of invoices and the receipt and reconciliation of payments from drug labelers. There are several major functions that take place as part of this process. DRAMS will perform or assist in performing each of the following tasks.
  - Extracting Claim, Provider, and NDC information from the MMIS and loading it into the DRAMS database.
  - Auditing claims to head off disputes before they can occur.
  - Comparing HCFA data to data from other sources so that discrepancies can be caught before any harm is done.
  - Generating invoices for labelers.
  - Allowing the entry of payment data from checks.
  - Dispute resolution.
  - Data Analysis
  - The Department has initiated the Montana Integrated Data for Evaluation and Assessment (IDEA) Project to provide improved support for the delivery of maternal and child health-related services at the local public health departments and to improve local and state capability for evaluation of program effectiveness. The seven-year (1997-2003), federally funded IDEA Project is being developed in four phases, with first emphasis on providing local capability for immediate benefit to clients and local health professionals.

Human and Community Services Division

- The Human and Community Services Division's Public Assistance Bureau (HCSD/PAB) is currently enhancing the services offered in Montana's County Offices of Public Assistance (OPA). This effort involves projects ranging from the addition of eligibility determination for the Children's Health Insurance Program (CHIP) in county offices statewide to a more effective dissemination of information used in the management of county assistance caseloads. To meet these objectives, the Department has recently upgraded OPA personal computer systems in all county offices. These upgrades provide the offices with increased system performance, data storage capabilities, and updated operating systems. Technical services have installed TESS, Oracle-based software used in determining eligibility for CHIP, on the new PC's.

Operations and Technology Division

- The Department has contracted with TRW to install and implement productivity enhancement software. This software will provide TRW with enhanced programming and debugging tools which are expected to increase programmer productivity. The software will reside on a client server and will allow TRW to perform development and testing of the Department's three major mainframe systems, TEAMS, CAPS, and SEARCHS, in the client server environment and utilize tools available in the Windows software.

- The Department will also continue efforts to automate and streamline fiscal processes. A project started in FY 2000 identified automation needs for cost allocation, travel voucher entry, and payments and purchasing request processing. These automation projects will be designed and developed starting in FY 2000 with additional automation needs to be identified by the Fiscal Re-engineering Team to follow in FYs 2001 and 2002.

- The Department of Public Health and Human Services, in conjunction with the Department of Labor and Industry will continue the development and implement the Virtual Human Services Pavilion (VHSP). Combining the State's existing systems and networks with the latest Internet technologies, the VHSP fulfills the promise of the information age by opening the door for all Montanans to electronically access their government.

  The VHSP relies on user-friendly, point-and-click computer graphics to facilitate data entry and retrieval by the public and by government personnel. Using thin-client technology, the VHSP is a web application featuring a 3D graphic of the State capitol. The user "walks" into the building and sees doors to walk through for the Departments of Labor, Public Health and Human Services, Commerce, the Governor's Office, and the University System. Once in a "room", the individual sees a set of virtual kiosks representing each of the VHSP applications. These graphics provide a one-stop, uniform interface to complex and disparate computer systems, making them both accessible and easy to use. The system is designed to provide an entry-point for individuals seeking government information and services.

IT PROJECTS FOR FY02-03

Because of federal requirements placed on State health services departments, the Department plans to implement an electronic benefits transfer (EBT) process that will utilize electronic information technology to deliver Food Stamp, TANF (Temporary Assistance to Needy Families), and WIC (Women, Infants, and Children) benefits. The goals are to streamline the benefit issuance and redemption procedures, improve security, and eliminate the costs of producing and handling paper documents. The Department will design and implement a unique approach to ABT, developing it's own EBT platform for transactions instead of contracting with the currently limited transaction vendors. This approach will give Montana much more flexibility and potential cost savings.

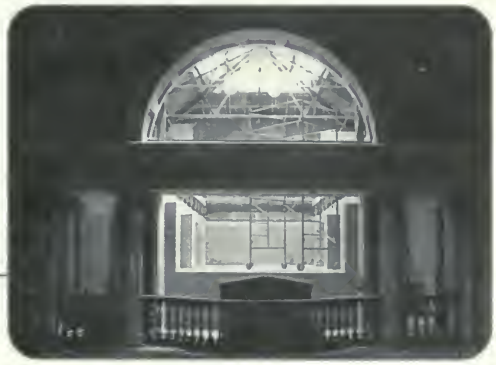
Public Service Commission

Information Provided by
Joel Oelfke

http://www.psc.state.mt.us

CURRENT IT PROJECTS

- The Commission continues its work on an Internet system and the following functionality was added:
  - The ability of the public and interested parties to submit electronic comments
  - The ability to track public comments
  - The ability to perform price comparison checks for gas and electrical suppliers
- The driving force behind these enhancements is twofold.
  - Many of the regulated companies are requesting the ability to perform more functions electronically.
  - The Commission is able to save taxpayer dollars and become more efficient by per forming, storing and managing work electronically.
- The Commission continued work on an Intranet site for use by office staff. Some of the systems that have been converted to web interface Intranet systems are:
  - The internal gas electric supplier management systems
  - The public comment tracking system



Department of Revenue

Information Provided by:
Jeff Miller

http://www.state.mt.us/revenue/rev.htm

IT STRATEGIES

The Department developed two key strategic plans that focus on the use of technology to enable the Department to accomplish its major business activities: state tax administration, property valuation and assessment, and liquor distribution. The Information Technology Strategic Plan and the Electronic Commerce Strategic Plan provide strategies for using technology to enable department business processes. Effective use of technology is critical to enabling the Department's two primary objectives: enhanced customer service and increased net financial benefit to the state.

CURRENT IT PROJECTS

- The Department implemented Phase I of the Process Oriented Integrated System (POINTS) during the current biennium. POINTS Phase I lays the foundation for overall tax administration and supports the Department's move toward a customer-focused, process-centered organization that integrates business processes and information systems. The core functionality of POINTS includes modules that register a customer, process a return, account for payments/liabilities, manage cases or accounts for audit and collection activities, and prepares forms and correspondence. POINTS Phase I involves the wage-based taxes, employer withholding and unemployment insurance. POINTS Phase II integrates several other taxes including Combined Oil and Gas (COGS), Individual Income, Corporate License and Income, and Property (real and personal). Through POINTS, the Department will realize the following benefits:
  - streamlined department processes;
  - enhanced customer service (a single call, that's all);
  - an adaptable system architecture responsive to both technological and legislative changes to promote efficiency;
  - improved tax processing accuracy and accelerated taxpayer service;
- The Department maintains several electronic filing options for Montana's individual income tax filers.
  - The Joint Federal/State Electronic Filing program enables individuals to jointly file their federal individual income tax return and their Montana individual income tax return electronically.
  - Internet filing is also developing as an option for filing Montana tax returns.

- Telefile for eligible taxpayers to file their Form 2S using the telephone. The use of telefile decreased between 1998 and 1999 by about 5%, while electronic filing in creased by almost 32%. Overall approximately 11% of our total customers file electronically.

- The Department intends to expand these filing options to other forms of tax in the next biennium.

- For Montana's business taxpayers, the Department also maintains several filing and remittance options.
  - The use of fax scanning and data collection technology enables the Department to capture information electronically with minimal staff involvement. Presently this is used for Agency Liquor Store Orders, the New Hire program, and STAWRS.

  - The use of scannable tax payment coupons captures taxpayer specific information and remittances without data entry. This is used for several tax types including with holding, unemployment insurance, corporate income and individual income.

  - The Department uses EFT technology, coupled with ACH debit and ACH credit capabilities for payment options for businesses.

  - The Department uses electronic data interchange (EDI) technology to support the transmission of wage-related data to the IRS.

  - The Department implemented the web-based WARP On the Web (WOW) to enable employers to file their unemployment/withholding quarterly tax returns and remittances electronically.

- The STAWRS program was created to simplify the joint federal and state reporting of withholding and unemployment insurance (wage based) taxes for businesses. The Department uses electronic commerce techniques, specifically fax scanning and EDI technology, for this reporting project. The pilot was successful and now is expanding to additional employers throughout the state. The pilot program received four national awards for its cost reduction, government efficiencies, and taxpayer friendly initiatives.

- The One-Stop Business Licensing Project, authorized in 1997, it created a centralized licensing program, where Montana businesses can obtain or renew most, if not all, of the licenses, fees and permits required by the State of Montana. The project focused on 13 licenses, involving seven state agencies in a collaborative effort to improve customer service for Montana businesses. The 1999 Legislature authorized the expansion of the pilot to a full program to include all licensees identified by state agencies. The program received national recognition for Innovation in Regulatory Reform for Small Businesses.

- The Department intends to implement Regression Testing in its information technology environment. Regression testing is the process of testing software containing newly added modules, enhancements or fixes, with the express purpose of verifying that original functionality has not been impacted by the new changes. With the implementation of POINTS, regression testing is critical to the system's ongoing success. Regression tests are run every time a program changes, testing and re-testing the integrity of the program.

- In collaboration and cooperation with the Department of Administration and local governments, the Department continues its work on the Montana Cadastral Project. This project is building the cadastral (ownership) layer for all parcels in the state. The ownership layer is the foundation upon which other layers will rest. The functionality and capabilities available by using geographic information system (GIS) technology in the property tax arena make this project critical to improving not only the State's but local government's ability to provide services to the public.

- The Department is collaborating with the Department of Administration to expand our use of imaging. The Department is in the final stages of installing software to utilize ISD's FileNet system. The Department continues to research this technology in an effort to reduce the volume of paper forms kept on record for archival purposes and improve methods for their retrieval.

IT PROJECTS FOR FY02-03

- Integrating the remaining taxes into POINTS will be a primary project for the next biennium. Of the 30+ taxes the department administers, over 15 will remain to be integrated into POINTS. The integration of the remaining taxes will continue to enhance customer service and increase net financial benefit to the state.

- The Department will pursue Imaging beyond its current collaborative effort with the Department of Administration. Imaging documents for archival purposes is only one end of the spectrum of capabilities that imaging technology brings. The Department will pursue Imaging technology for the purpose of capturing information from returns filed in order to enable verification and immediately integrate this information into the POINTS system. The potential to reduce heads-down data entry and minimize errors in returns processing make this technology worth pursuing.

- Web-enable both the STAWRS and One-Stop Business Licensing initiatives and make them available to a larger population of businesses in the state. Collaborate with both the federal government and other state agencies to improve customer-focused initiatives such as these.

IT STRATEGIC DIRECTIONS BEYOND FY03

The Department of Revenue's Strategic Directions beyond fiscal year 2003 include moving rapidly into the e-goverment arena with more emphasis on electronic commerce solutions to our business processes. The Department will substantially increase taxpayer access to electronic filing, payment, and communication products and services. We will make electronic filing, payment, and communication simple, inexpensive, and trusted so customers will prefer these options to calling or mailing. The Department will aggressively protect transaction integrity and accuracy and substantially reduce electronic transaction processing costs. In that light, the Department has adopted the following strategic objectives for 2007 for e-goverment:

- Electronically transact with 80% of the State's taxpayers;
- Substantially reduce the per return electronic transaction cost to less than $2.00;
- Achieve 100% transaction integrity and accuracy;
- Achieve 80% customer (taxpayer) satisfaction with e-government solutions;
- Achieve 90% distributor satisfaction with e-goverment solutions;
- Achieve 70% employee satisfaction with e-goverment solutions.

Office of the Secretary of State

http://www.state.mt.us/sos/index.htm

CURRENT IT PROJECTS

- Currently, the Secretary of State's office is in production with the newly designed OPPEN/UCC (Uniform Commercial Code) system. This project includes the internal application as well as the web-based public access subscription service for lien information. Additionally, we have entered into the maintenance phase with NIC, USA that is scheduled for a one-year period.

- The Administrative Rules of Montana bureau is currently working with TRW to provide the Administrative Rules electronically. The scope of the project includes access to the register via the web, allowing agencies to submit rules electronically, and electronic update of rules electronically.

- The Secretary of State is working with IE, LLP to provide web-access to the corporate records.

- After the implementation of the OPPEN/UCC project, the office identified the need for developing an interface between this system and the internal accounting systems. This project is in progress.

- The office is currently contracting with TRW to accommodate the migration of ISD's support of the legacy mainframe application for the Secretary of State's corporation database.

IT PROJECTS FOR FY02-03

- Future projects will focus on developing client/server applications for other business processes in the office such as Corporations, Elections and Notary. The office will also provide increasing access to information through their Internet web site.

- The office will research electronic commerce issues such as providing customers the ability to request, pay for and receive services through their web site and the feasibility of using electronic data interchange (EDI) to collect business information.

- The office will continue positioning itself to apply newer technologies, such as document management, imaging, electronic data interchange (EDI) and electronic commerce (EC), when it is cost effective and beneficial to the Office and customers.

- The office is involved with the RFP for the self-funded state portal.

Office of the State Auditor

Information Provided by:
Ken Kops

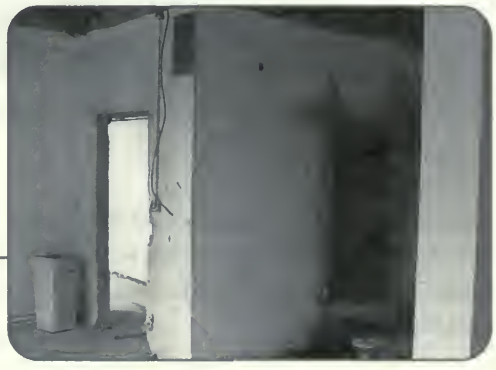
http://www.state.mt.us/sao/index.html

CURRENT IT PROJECTS

- The Auditor's Office moved locations this biennium. All computer equipment had to be moved and the new wiring modified.
- 'Securities' system was finished and brought on-line.
- Applications are currently being written for 'Investigations'.
- A number of desktop computers are in the process of being upgraded to PIII technology to keep up with ever-demanding software. A new server has been installed for increased performance, capacity, and data protection.
- Interfaces are currently being developed for connectivity to the NAIC database.

IT PROJECTS FOR FY02-03

The Office will be researching the ability to allow for submission of information through their web site. This could entail the filing of complaints or the registering of individuals for licenses of numerous types. The goal of the office is to use technology to improve all of the basic business functions we perform.



State Compensation Insurance Fund Division

Information Provided by
Sandy Leyva

http://www.montanastatefund.com

IT STRATEGIES

The Montana State Fund has a leading edge Information Technology environment. We operate in a client-server environment utilizing Oracle, AIX, Novell, and NT on the server side and Windows NT on the client. IT supports all business functions at the State Fund. Our PowerComp system that was launched last year provides Claims, Policy Services, Medical Payments, Accounting, Loss Control, and Audit functions for the State Fund. We continue to enhance and upgrade our equipment and software so the State Fund can provide excellent service to our customers.

CURRENT IT PROJECTS

- The State Fund will kick off a Data Warehouse project in August 2000. The Data Warehouse will make it easier for agents to query information on customers, provide the ability to perform ad hoc queries and to create reports of client information for analysis purposes, allow key clients to access and query their information electronically, and allow implementation of management performance measures.

- In July 1999, State Fund launched the PowerComp system. PowerComp includes Claims Management, Policy Services, Loss Control, Audit, Medical Pay, and Accounting functions. PowerComp also uses workflow in connection with FileNet Imaging Services. In FY2001 we will rewrite workflow to be one system that includes both Claims and Policy Services. We will also upgrade it to true 32-bit architecture and upgrade FileNet to Panagon.

- With emphasis being placed on the Internet and more functionality being provided by Internet and Intranet applications, the State Fund began to provide material to their customers through this media. In conjunction with the Data Warehouse we will be implementing a Web Server and giving access to specific Policy and Claims information to our Agents through the Internet.

- We began imaging all Claims documents in 1995. New Fund claims documents between 1990 and 1995 have not been imaged. We will perform an imaging back-file project to image all the Claims documents for this time frame. This will make all open and closed New Fund claims paperless.

- Upgrade the network infrastructure from 10MB Ethernet to 100MB Ethernet.

- Upgrade all client workstations below a Pentium 200Mhz to the current industry standard.
- Upgrade the PowerComp database server from an IBM S70 to a S7A. This includes upgrading the I/O plane and increasing memory.
- Replace the FileNet Imaging server and disk packs, to increase performance.
- Setup an agency-wide fax server. This will allow users to send and receive faxes from their desktops.

IT PROJECTS FOR FY02-03

The State Fund will be moving towards e-business on the Internet. We will be looking at reporting claims and quoting policies on the Internet.

IT STRATEGIC DIRECTIONS BEYOND FY03

The long-term strategic direction for the State Fund will continue to be in the area of e-commerce.

State Library

Information Provided by:
Darlene Staffelot

http://msl.state.mt.us
http://nris.state.mt.us (Natural Resource Information System–NRIS)

IT STRATEGIES

- The State Library is aggressively pursuing the development of more powerful web based applications to provide better, more efficient customer services to our patrons and to the libraries throughout Montana who participate in the statewide projects.

- The State Library (NRIS program) is aggressively pursuing the development of more powerful web based applications to serve the natural resource community. Rather than simply provide a clearinghouse of static, individual data files and coverage, we are developing interactive, ad-hoc query and mapping system to allow our users to get the answers they need directly from our web pages, rather than just the data they might need to generate the answers themselves. This strategy will also increase our efficiency by reducing the reliance on human intervention in largely repetitive data requests, which will be served by our web systems.

CURRENT IT PROJECTS

- The State Library implemented an electronic full-text periodical database and provided licenses for the system to public, school, academic, and agency libraries. The database is centrally located at the Library and is accessible through SummitNet.

- Montana Library Network program ñ web based gateway to connect libraries around the state with access to shared catalogs. (http://msl.state.mt.us/mln/)

- The Library (NRIS program) has deployed several new Internet applications and continues development in that arena. Current interactive applications include the Montana Rivers Information System, the DEQ's TMDL water quality system, the Upper Yellowstone River physical features inventory and TopoFinder, an interactive application allowing users to search and find topographic maps in Montana.

- The Library (NRIS program) has added several major new data themes to the clearinghouse including statewide digital USGS quadrangle maps at 3 scales, 90-meter land cover data, and National Wetland inventory data.

- The Library (NRIS program) converted our web server to a new NT platform.

IT PROJECTS FOR FY02-03

- The Library will be investigating and piloting a new GILS project. The Government Information Library Service (GILS) pilot project will develop a one-stop directory for state government information. In the short term, it will offer subject-based, precision searching of information on state agency websites. In the long term, GILS can provide access to a document throughout its lifetime, from creation to distribution to archives. The Library proposes to work with the newly established Internet Technology Services Bureau to offer skilled assistance to state agency webmasters and content creators to make their information more readily available to the public. The Library will develop the guidelines, indexing tools, and training necessary to make agency Web pages compliant with ISO z39.50 search standards and consistent with the Federal Information Clearinghouse guidelines and other state government information access projects.

- The Library will continue to implement the Montana Library Network Program.

- The Library seeks to extend access to specialized online databases needed by professional and research staff of the various state agencies in the same way it has supported access to general interest full-text databases for libraries and their patrons statewide. Subscriptions to these databases will be negotiated with vendors to provide the broadest access possible for state employees working from their desks. Examples include indexes to the agricultural, biological, ecological, and other life sciences literature, as well as important public affairs, commerce, dissertation, and conference proceedings databases.

- A unique online document delivery service will be offered to state employees who use PubMed, a comprehensive index to the medical literature provided by the National Library of Medicine on the Internet. Web pages focused exclusively on unique resources pertinent to the information needs of state employees will provide direct access to library services, including registration, search request, and document request forms.

- The library's catalog of books and government documents will be made available through an easy to use web interface.

- The Library will continue to implement an electronic full-text periodical database and provided licenses for the system to public, school, academic, and agency libraries. The database is centrally located at the Library and is accessible through SummitNet.

- The Library currently has a great deal of time invested in the UNIX operating system and Sybase database software. However, because of state standards and upkeep costs associated with these applications, the library will be converting selected portions of their operations to Microsoft NT and the Oracle database software package.

- In the next 2 years, The Library (NRIS program) will be deploying more powerful and integrated natural resource data extraction and analysis tools on the web.

IT STRATEGIC DIRECTIONS BEYOND FY03

- The Library will implement a full GILS program if the pilot proves successful and indispensable.

- The Library will continue implementation of the GIS, natural resource data tools on the web, statewide periodical database project, and MLN.

Teachers' Retirement System

Information Provided by:
John Hessler

http://www.trs.doa.state.mt.us/

IT Strategies

The Teachers' Retirement System (TRS) utilizes information technology to accurately maintain and update the accounts of over 18,000 active members. TRS also pays monthly benefits in excess of $8,000,000 to retired members of the system and their beneficiaries.

Current IT Projects

- PeopleSoft Pension Administration—In anticipation of the increase in retirements that the "baby boomer" generation will produce, the Teachers' Retirement System has seen the need to develop a new Pension Administration system. The PeopleSoft Pension Administration system has been selected as the replacement for the current system. The PeopleSoft software will be extensively modified to meet the needs (and anticipated future needs) of the Teachers' Retirement System.

- Workflow—The Teachers' Retirement System receives approximately 6,500 pieces of correspondence each month. These pieces of mail can range from changes of address forms, to federal withholding forms, to applications for retirement, and many other items. Each of these pieces of mail generates work for someone in the office. To better allocate and track work in the office, a workflow system will be developed that will allow correspondence that has been scanned into the imaging server to be directed to the appropriate employee for action. The workflow system will track the work items as they enter the office until they are completed. The status of any work item may be found at any time by simply querying the workflow system.

- Web reporting of contributions—To facilitate the gathering of in excess of $87 million in annual contributions from over 400 reporting entities statewide, the Teachers' Retirement System will be deploying a Contribution Reporting System. The solution will be entirely web-based and fully integrated with the PeopleSoft Pension Administration system. The custom web application will utilize Oracle web technology. In addition, the web application will present current data to the members, and it will allow online retirement estimates and account information for retirement planning.

IT Strategic Directions Beyond FY03

The long-term strategic direction for TRS has already been set with the selection of the PeopleSoft Pension Administration software. Over the lifetime of this system (through upgrades), it is expected that the system will become web-enabled, thus enabling improved access to data for TRS staff, school district clerks, active members, and retired members.

Department of Transportation

Information Provided by:
Mike Randall

http://mdt.state.mt.us/

IT STRATEGIES

- Provide a safe and efficient intermodal transportation system
- Maximize external customer satisfaction
- Enhance the social, economic and environmental qualities of Montana
- Maximize revenue streams and explore innovative financing options
- Deliver a cost-effective transportation program to the citizens of Montana
- Develop a consistent, statewide project programming methodology
- Total commitment to continuous process improvement
- Develop and sustain a quality culture
- Foster effective communication
- Provide a safe and healthy workplace for employees
- Optimize the MDT work environment to assure a qualified and stable workforce
- Get the best competitive compensation plan possible for employees

IT Strategic Goals for Supporting Departmental Strategic Initiatives

- Provide for effective decision-making capability
- Refine financial business information systems for day to day operations
- Develop comprehensive Performance Programming system, driven by our management systems
- Move forward with enhancement of E-Government services
- Review and when beneficial refine business processes and workflows while implementing new IT capabilities
- Orchestrate the deployment of IT initiatives throughout the department
- Integrate information systems

- Provide for comprehensive electronic records and documents storage, access, and related management
- Provide adequate support and training of all departmental employees using IT investments
- Implement programs for supporting the career development of professional level IT human resources
- Seek improvements of IT infrastructure for supporting business strategies
- Support ITS (Intelligent Transportation System) initiatives where appropriate

CURRENT IT PROJECTS

- Will implement two of three planned phases of the AASHTO (American Association of State Highway and Transportation Officials) system modules during the '01 biennium. All modules together support an array of construction contract management needs. Implemented in FY '00, the DSS–decision support system module has historical information available for analysis from 1986 to present. The bid estimation module was also implemented in FY '00. The contract preparation, letting, and awards modules will be deployed in FY '01.

- Over 1000 forms and reports were converted to work within a Microsoft Windows environment. These forms and reports support a variety of systems such as BDS–Budget Development System, Stores Inventory Management, Tentative Construction Planning, Federal Funding Obligation, Personal Services Allocations, Equipment Shop work order management and much more.

- The Department resurrected its PSBM–Personal Services Budget Monitoring system. The system required new interfaces with SABHRS in order to function properly. This system supports the management of departmental FTE (dollars, hours) and positions.

- The Department enhanced its Internet web pages/e-government functionality. Many forms are now available electronically through the Internet. In addition a pilot project is now being used by 10 commercial carriers for self issuance of permits. For ease of use, new web page features were added such as comprehensive content search and table of contents links.

- Additional services were added to the Department's integrated information architecture (TIS). For example, new virtual world data collection mechanisms have been implemented. This offers the ability to collect roadway data while accessing images of the roadway from the office. It automates the storage of the information collected and provides ties to the roadways infrastructure (location, etc.).

- The Department enhanced its dial up and some LAN (local area network) capabilities. For example, the department has migrated (phase 1) to gigabit switched Ethernet within its Helena data center. RAS–remote access services have also been enhanced. These services are used to allow dial in access to our systems by field employees not able to attach directly to the dedicated network.

- The Department now collects fuel tax data electronically from over 50% of our fuel distributors and over 90% of our distributors use electronics funds transfers.

- Document management functionality (check in check out, versioning, workflow, content searches, and more) is being added to our CADD (computer assisted drafting and design) system. This offers the Department a coordinated approach that supports efficient management of the electronic design files.

- The Department has begun the prototype design phase for the development of its new project, activity, and cost accounting system. This system will ultimately provide the core framework for its movement to integrated financial management systems, closer ties to SABHRS and more.

- The Department must become Level One CVISN compliant by the end of calendar year 2003 in order to remain eligible to receive US Department of Transportation ITS funding. The objective of CVISN (Commercial Vehicle Information Network) is to deploy a nationwide network of interactive commercial vehicle information systems that will support the areas of commercial vehicle safety information exchange, credentials administration, and electronic roadside screening.

- The Department will complete the installation of 21 permanent, automated, commercial vehicle data collection sites in 2001. These STARS (State Truck Activity Reporting System) sites will collect new and more accurate information about the size, weight and type of trucks operating on Montana's highway systems. Collection of more and better data will result in improved highway design life and therefore a cost savings to the Department, in addition to steering the enforcement program.

IT PROJECTS FOR FY02–03

- The Department will implement electronic commerce (EC) technology to enable electronic submission of contractor's bids. They will also expand use of EFT technology, in conjunction with EDI–electronic data interchange. Enhancing the "public involvement" process through E-government services will be explored and implemented where practical.

- The Department will deploy the new AASHTO Site Manager (Contracts Management & Progress Estimates) modules. These systems manage contractor's construction progress, contractor payments, and much more. This will be the last phase of a three-phase plan for deployment of new AASHTO systems modules for all facets of roadway construction contracts management.

- The Department plans to redevelop many of their financial systems. Project, activity, and cost accounting support the core requirements of their financial systems. Federal reimbursements and many of their management systems use these core financial accounting mechanisms.

- The Department will implement new and existing mechanisms for supporting additional remote data transmission needs. These mechanisms use digital based telecommunications technologies. Palm held / mobile devices, wireless Ethernet, switches, satellites, fiber optics, digital cellular and more are examples of core digital telecommunications technologies.

- The Department will be implementing additional document management and data warehousing technologies throughout the Department.

- The Department plans to deploy a new Pre-construction Management System within the 2002–2003 biennium. This system manages all activities related to the engineering design processes for construction projects.

- The Department will continue development of the TIS (Transportation Information System) throughout the biennium. The TIS provides the integrated information framework standards for integrating information systems (non structured electronic information as well as structured) within the department.

- Further development of Montana's "public roads" transportation information framework within the state's GIS (geographic information systems) as well as for other information systems.

IT STRATEGIC DIRECTIONS BEYOND FY03

- Research and further use of voice activated software services

- Research into AI–Artificial Intelligence applications for Transportation purposes (neural networks, expert systems, computer based simulations, etc.)

- Continue deploying ITS (Intelligent Transportation System technologies) such as continuing toward the goal of fully automating the states five priority MCS weigh stations

IT Expenditures

State of Montana IT Expenditures

The following statewide expenditure information includes the University System.

The total statewide expenditures for fiscal year 2000 were approximately $164.3 million. Figure 1 shows how those expenses break down.

FY00 Statewide IT Expenditures
(Includes University System)

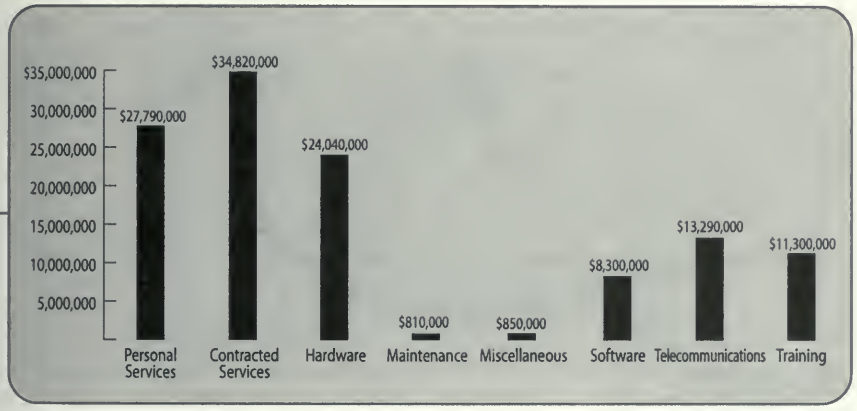


Figure 1

FY00 Statewide IT Expenditures by Percent
(Includes University System)

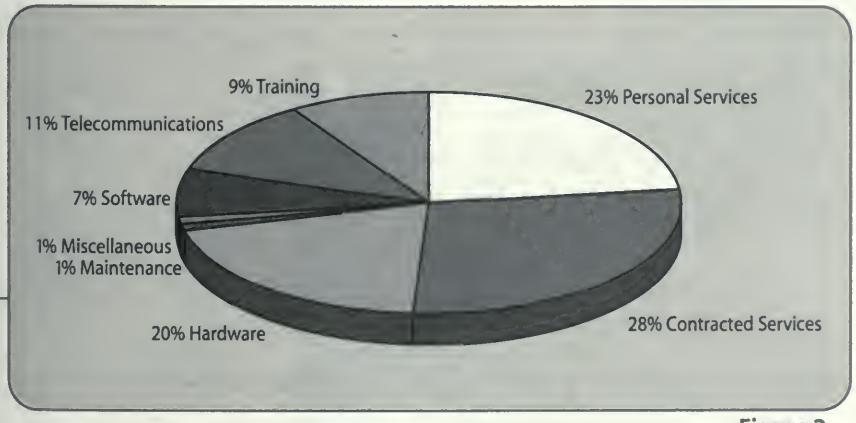


Figure 2

In Figure 3, statewide IT expenditures are represented as a percentage of total statewide expenditures for FY00 (as provided by the Legislative Fiscal Division).

Note that IT expenditures account for 3.21% of the total expenditure of funds during this timeframe. This is below the national average of 3.91% [1] for state government IT spending levels for the same timeframe.

FY00 TOTAL STATE IT EXPENDITURES
AS A PERCENTAGE OF TOTAL STATE EXPENDITURES (INCLUDES UNIVERSITY SYSTEM)

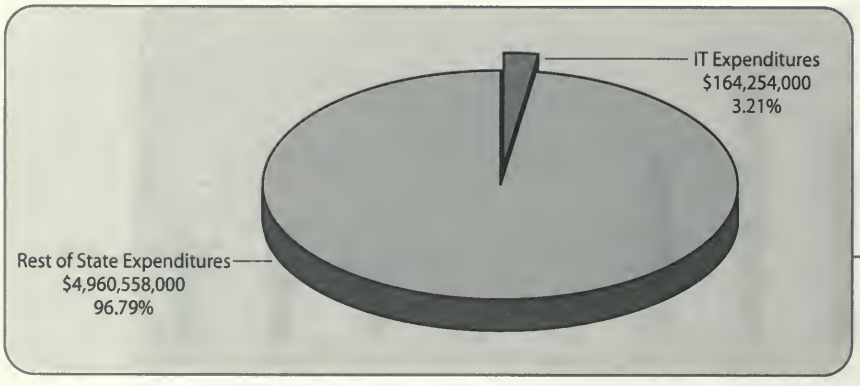


Figure 3

[1] Gartner Group, Old Opinions About IT Spending in the New E-World, August 3, 2000. **www.gartner.com**

IT Councils and Committees

IT Councils and Committees

Over the course of the biennium, agency executives and IT managers in the State have been working diligently through various IT governance organizations to direct the State's IT efforts. These organizations performed strategic planning and directed agency activities relating to a wide variety of IT issues. The reader will find information pertaining to the committees and subcommittees and their results in the following pages.

Interim Information Technology Management Study Committee

Information Provided by:
Jeff Brandt

AUTHORIZATION STATEMENT

The 1999 legislature, in HB2, directed the Legislative Finance Committee to conduct an interim study of information technology management.

PURPOSE

The legislature had expressed concerns during the 1999 legislature regarding state agencies' investments in and expenditures for information technology hardware, software, and services. The study was to include a review and assessment of the following:

- management review and approval processes for information technology planning and budgeting;
- governance structures established to provide policy direction for information technology;
- adequacy and appropriateness of existing policy regarding asset replacement cycles;
- current level of interagency coordination of information technology deployment to minimize costs, reduce duplication, maximize efficiencies, and the greatest possible services to the citizens of Montana;
- past and current levels and trends with regard to information technology expenditures, with appropriate comparisons to other states and industry sectors;
- methods used to develop rates for proprietary-funded agencies providing information technology services; and
- current information technology statutes, rules, and policies.

The focus of the study was to recommend:

- the format for presentation of information technology budget information, the *Unified Computer Budget Summary*, to the legislature during the 2001 legislative session; and
- a governance structure that will enable effective policy decisions.

MEMBERSHIP

A subcommittee, made up of the following members, was established to conduct the study:

- Representative Bob Raney, Chair
- Representative Tom Zook
- Senator Greg Jergeson
- Senator Tom Beck

The legislative fiscal analysts that were assigned to the subcommittee are:

- Pam Joehler
- Greg DeWitt

RECOMMENDATIONS

The following recommendations will be presented to the Governor and the 2001 legislature.

Information technology budget information. The Legislative Finance Committee recommends a select subcommittee, made up of members of the House Committee on Appropriations and Senate Finance and Claims Committee be appointed to:

- review the Unified Computer Budget Summary;
- make preliminary policy decisions for dealing with IT budgets from a statewide perspective;
- set internal service rates for the Information Service Division of the Department of Administration; and
- make budget decisions on IT related budget requests.

Governance structure. The Legislative Finance Committee recommends the following structure be implemented:

The legislature enact "legislative guiding principles" to steer the development of IT resources in Montana state government;

The legislature create a Department of Information Technology, using the existing staff in the Information Services Division of the Department of Administration. The director of the department should carry the title and function of the Chief Information Officer (CIO) for the state. Responsibilities of the CIO and department should include the following:

- develop and maintain a statewide strategic IT plan;
- review and approve agency IT plans;
- establish statewide policies and standards for IT;
- evaluate IT budget requests;

- coordinate and approve the development of shared IT systems and applications; and
- report to the legislature.

The legislature should create an Information Technology Board to advise the CIO. The IT board should have its membership and appointing authority included in statute and should have representatives from all three branches of state government and include representatives for local and federal government and private industry.

The legislature should accomplish oversight of IT during the interim with an existing interim standing committee, the Legislative Finance Committee, and during legislative sessions with the Long-Range Planning Subcommittee.

IT related governance statutes should be consolidated into one section of law and specific content requirements should be codified for agency and statewide IT strategic plans. This section should be a new section of law dedicated exclusively to information technology governance and should:

- begin with legislative guiding principles statements;
- create and assign duties of the Department of Information Technology;
- rename and assign members and duties of the Information Technology Board; and
- define the content requirements for agency and statewide IT strategic plans.

A bill is being drafted for introduction to the 2000 legislative session.

Minutes and Information Technology Management Study Final reports are available at **http://leg.state.mt.us/Fiscal/studies/It/IT_study.htm.**

Information Technology Advisory Council (ITAC)

Information Provided by:
Audrey Hinman

http://www.state.mt.us/isd/groups/itac

The Information Technology Advisory Council (ITAC) is statutorily created by 2-17-502, MCA. ITAC is an advisory council to the Department of Administration.

MEMBERS

A new ITAC structure went into effect on October 1, 1999 that includes a 14-member council with eight standing members and two tier representatives from each of the three tiers. **Tier one** consists of the following agencies: Commissioner of Political Practices, Montana Arts Council, State Library, Public Services Commission, Secretary of State, Governor's Office, Historical Society, and the State Auditor. **Tier two** consists of the following agencies: Military Affairs, Agriculture, Livestock, State Fund, Commerce, and Environmental Quality. **Tier three** consists of the following agencies: DNRC, Fish, Wildlife & Parks, Labor and Industry, Revenue, Justice, and Corrections.

The members of ITAC for the 2000–2001 biennium were:

- Lois Menzies, Department of Administration, Chair
- Pat Chenovick, Judicial Branch
- Bob Person, Legislative Branch
- Scott Buswell, Office of Public Instruction
- Joyce Scott, Office of the Commissioner of Higher Education
- James Reno, Yellowstone County
- Bill Salisbury, Department of Transportation
- Mike Billings, Department of Public Health and Human Services
- Sharon McCabe, Montana Historical Society, Tier One Representative
- Angela Fultz-Nordstrom, Secretary of State, Tier One Representative
- Mark Simonich, Department of Environmental Quality, Tier Two Representative
- George Harris, Department of Livestock, Tier Two Representative
- Mary Bryson, Department of Revenue, Tier Three Representative
- Larry Fasbender, Department of Justice, Tier Three Representative

2000–2001 Biennium Activities

- Electronic Government Strategic Planning Conference—The first day of the conference was an educational day provided for policy makers. Lieutenant Governor Judy Martz gave the welcome and introduction. Carol Kelly from the META Group provided an industry education presentation. The Public Sector Manager from the Internet Business Solutions Group at Cisco Systems, Michele Grisham, provided a private sector perspective. She was followed by Steve Kolodney, Director of the Washington Department of Information Services, who provided

another state's prospective. A federal government perspective was given by Bob Barr, Assistant Commissioner, Electronic Tax Administration, Internal Revenue Service. Peter Blouke, Director, Montana Department of Commerce, gave an overview of the potential economic impact to Montana of e-government. The conference was concluded with closing remarks from Lois Menzies, Director, Department of Administration.

The second day of the conference was open to ITAC members and agency directors for the purpose of obtaining input on the strategic issues surrounding e-government. Five main topics were provided for discussion: privacy and security, electronic payments, portals, applications, and funding. In addition to the five areas provided for discussion, the group discussed the overall vision Montana should have for e-government and ended with a discussion on the governance structure of IT in Montana.

- Oracle Enterprise License Agreement—ITAC endorsed the strategic direction for Oracle as the enterprise database for the next five years. ISD entered into a five year contract with Oracle for an Enterprise License Agreement.

- Restructure Subcommittee Recommendation—ITAC endorsed the Restructure Subcommittee recommendations to make the following changes to the old ITAC structure:
  - Move DNRC from Tier 3 to Tier 4
  - Combine Tier 2 and Tier 3 to form one Tier (Tier 2)
  - Make both Tier 5 agencies standing members (thus removing Tier 5 leaving 3 Tiers)
  - Allow each Tier to have 2 representatives

- ISD Budget–Provided feedback on the 2002–2003 budget for ISD.

- E-Government Strategic Direction–ITAC endorsed the strategic direction of selecting a private vendor to provide electronic government services following a self-funded portal model.

SUBCOMMITTEES

Restructure Subcommittee

The ITAC Restructure Subcommittee was formed to address a recommendation adopted by ITAC on September 30, 1998. The recommendation was made by the ITAC Governance Subcommittee and was as follows:

"In June 1999 ITAC should review the manner in which it is organized to determine if it is satisfied with the changes that have been made to the organization, especially the decision to create an 11-member council that represents all agencies."

Comments on the current structure of ITAC were solicited from all agencies in a memo dated July 13, 1999 from Lois Menzies. After reviewing the comments received and discussing the issue, the ITAC Restructure Subcommittee made the following recommendation on September 8, 1999.

The current ITAC structure in effect since July 1, 1997 is an 11-member council with six standing members and one tier representative from each of the five tiers.

Current Structure

TIER 1
- Commissioner of Political Practices
- Montana Arts Council
- State Library
- Public Services Commission
- Secretary of State
- Governor's Office
- Historical Society
- State Auditor

TIER 2
- Military Affairs
- Agriculture
- Livestock
- State Fund

TIER 3
- Commerce
- Environmental Quality
- DNRC

TIER 4
- Fish, Wildlife & Parks
- Labor and Industry
- Revenue
- Justice
- Corrections

TIER 5
- Transportation
- Public Health and Human Services

STANDING MEMBERS
- Administration
- Judicial Branch
- Legislative Branch
- Office of Public Instruction
- Commissioner of Higher Education
- Local Government

The ITAC Restructure Subcommittee recommended that these changes be made to the current ITAC structure:

Move DNRC from Tier 3 to Tier 4
Combine Tier 2 and Tier 3 to form one Tier (Tier 2)
Make both Tier 5 agencies standing members (thus removing Tier 5 leaving 3 Tiers)
Allow each Tier to have 2 representatives

The new ITAC structure to be in effect October 1, 1999 would be a 14-member council with eight standing members and two tier representatives from each of the three tiers.

Recommended Structure

TIER 1
Commissioner of Political Practices
Montana Arts Council
State Library
Public Services Commission
Secretary of State
Governor's Office
Historical Society
State Auditor

TIER 2
Military Affairs
Agriculture
Livestock
State Fund
Commerce
Environmental Quality

TIER 3
DNRC
Fish, Wildlife & Parks
Labor and Industry
Revenue
Justice
Corrections

STANDING MEMBERS
Administration
Judicial Branch
Legislative Branch
Office of Public Instruction
Commissioner of Higher Education
Local Government
Transportation
Public Health and Human Services

All recommendations of the ITAC Restructure Subcommittee were adopted.

Montana Online Subcommittee
ITAC created this Subcommittee to review Montana Online and to make strategic policy suggestions.

The Subcommittee made the following recommendations to ITAC on December 15, 1999.

Recommendation: That ITAC approve the following purpose statement for the State of Montana homepage:
Montana Online is the State of Montana's gateway to Montana information and services.

Recommendation: That ITAC aggressively pursue e-government strategies. These strategies should include delivery of direct services as well as the delivery of information.

Recommendation: That ITAC aggressively pursue e-commerce strategies. These strategies should include identification of alternate revenue sources to recover costs and enhance revenue. For example, establishing fee structures and methods for standard and premium services, advertising, etc.

The three recommendations of the ITAC Montana Online Subcommittee were all adopted.

Governance Subcommittee
ITAC established a Governance Subcommittee to make recommendations regarding the appropriate governance structure for information technology (IT) for state government. The decision to establish a subcommittee resulted from ITAC addressing the issue of "IT governance" at the E-Government Strategic Planning Conference held on February 29, 2000. The charge to the subcommittee was to develop a recommendation that would be reviewed by the full ITAC prior to submission to the Governor for endorsement. The endorsed recommendation would then be presented to the Legislative IT Management Study Subcommittee for their consideration.

Overview. The subcommittee met three times, on 4/11/00, 4/24/00 and 05/01/00. The subcommittee members are Peter Blouke, Bob Person, Larry Fasbender, Mary Bryson and Lois Menzies, who also chaired the subcommittee. Jeff Brandt served as staff to the subcommittee. Pam Joehler and Greg DeWitt, the two Legislative Fiscal Analysts staffing the Legislative IT Management Study Subcommittee, also attended some of the meetings.

Alternative Governance Models. The primary focus of the subcommittee centered on the relative merits of two basic governance models, achieved through the creation of a chief information officer (CIO):

Combined Responsibilities: Policy and Operational Responsibilities Combined in a Single Organization. Policy and operational responsibilities would be combined under a department headed by a CIO. This would be a newly created department, severing component parts of ISD from the Department of Administration.

Separated Responsibilities: Policy and Operational Responsibilities in Separate Departments. Policy responsibilities would be placed in the Governor's Office, with a relatively small policy and planning staff, and operational responsibilities would remain in the DofA (ISD). The policy and planning responsibilities assigned to the Governor's Office, including those that would move if currently performed by ISD, are:

- Describing and Articulating the Vision
- Executive Branch Chief Policy Advisor
- Strategic Planning
- Enterprise Policy
- Enterprise Standards Approval
- Agency Project Approval Consistent with Strategic Plan, etc.
- IT Project Budget Review & Approval
- IT Infrastructure Project Approval Consistent with Strategies, plans, etc.
- Agency and ISD Contract Approval
- Represent the State to:
  - Legislature
  - Economic Development Interests
  - External Governance Organizations (NGA, NASTD, NASIRE)

Additional Responsibilities of the CIO. Additional responsibilities of the CIO, regardless of the alternative chosen, include:

- IT Budget Review & Approval. Agency IT budgets are developed and submitted to the CIO for review and approval for consistency with statewide plans as part of the budget development process.

- IT Innovation Funds. Any fund that would be established for the limited purpose of funding IT projects would be administered by the CIO.

- Economic Development. In cooperation with the Department of Commerce, the CIO would be jointly responsible for fostering private sector economic development in the IT business sector

- Public-Private Partnership. The CIO would seek out cooperative partnerships between public and private entities to strengthen strategic policy initiatives and provide the most cost efficient governmental services.

Advantages and Disadvantages. The subcommittee developed the following advantages and disadvantages for each alternative

Combined Responsibilities

Advantages

- Clear lines of departmental authority and responsibility consistent the governmental structure specified in the State Constitution
- Single point of control, accountability and contact for state's IT enterprise activities
- Single point of responsibility in order to react to a rapidly evolving, complex environment
- Ability to effect policy decisions through direct control of deployment (operational) activities
- Increased communication between policy staff and operational management that provide policy input
- Policy & planning functions funded by allocations from operations
- More influence on department directors as a member of the cabinet
- Strong connection between policy and initiative development and ability and commitment to deploy

Disadvantages

- Operational responsibilities compete with policy and planning responsibilities
- ISD's operational responsibilities dominate policy and planning responsibilities at expense of other agency input
- Greater administrative support costs (personnel officer, legal support, etc.)
- Another department is created
- Potential conflicts of interest; example: consideration of outsourcing opportunities
- Department level status rather than Governor's Office lessens influence and visibility
- Policy-Deployment Disconnect—"Not Invented Here Syndrome"—agency resistance to implementing initiatives developed in another department

Separated Responsibilities

Advantages

- CIO's responsibilities are not dominated by day-to-day operational activities
- CIO's responsibilities are not dominated government issuesófocus is more global (economic development, etc.)
- More influence in the Governor's Office through closer proximity to Governor and staff
- More influence with other state agencies as a unit of the Governors Office
- More flexibility in responding to rapid changes in economic and IT environments
- Avoids creating a whole new department level bureaucracy
- Provides an incremental approach to elevating the role of IT within government rather than the more radical step of creating a new department

Disadvantages

- Potential disagreements between the CIO and the director of the Department of • Administration regarding authority, priorities, expenditure of funds, etc.
- Costs associated with some duplication of planning support staff in both agencies
- Isolation from ongoing activities
- Funding/cost recovery issues

- Policy-Deployment Disconnect—"Not Invented Here Syndrome"-ISD resistance to implementing initiatives developed in Governor's Office
- Honest and manufactured confusion by agencies and vendors regarding decision-making authority

The subcommittee developed the following recommendations.

Recommendation 1: Establish a department of information technology headed by a a Chief Information Officer (CIO)

The department would have the following characteristics:

- The CIO would be a cabinet level appointment
- The department would be responsible for enterprise IT policy and planning and enterprise IT infrastructure development, deployment and operations currently provided by the Information Services Division (ISD)
- Additional duties of the CIO would include:
- In conjunction with the Department of Commerce, fostering private sector economic development in the IT business sector
- Establishing cooperative public-private sector partnerships to strengthen strategic policy initiatives and provide cost effective government services
- Review and approval of agency IT initiatives for consistency with state-wide plans as part of the budget development process
- Administering and IT innovation fund (if such fund is established) for financing IT projects

Recommendation 2: Retain an advisory ITAC, but with expanded membership

The Information Technology Advisory Council (ITAC) would be continued, with the following characteristics:

- ITAC would continue to have advisory status to the new information technology depart ment
- The CIO would not chair ITAC
- ITAC membership would be expanded to include the following representation:
- Private sector
- Legislators

ITAC did not adopt these recommendations and did not forward a governance recommendation to the Governor or the IT Management Study Subcommittee.

E-Government Strategic Direction Ad-Hoc Subcommittee

This Subcommittee was put together to take a strategic look at the direction of e-government services and whether a self-funded portal model should be recommended. The following recommendation was made.

The ITAC ad-hoc subcommittee recommends we move forward with the self-funded portal model and take advantage of providing services through a single face of government to our businesses and citizens without requiring a large appropriation.

This recommendation of the ITAC E-Government Strategic Direction Ad-Hoc Subcommittee was adopted.

Information Technology Managers Council (ITMC)

Information Provided by:
Wendy Wheeler

http://www.state.mt.us/isd/groups/itmc/

The Information Technology Managers Council (ITMC) was formally established as an advisory council by Agency Order in November 1997. The group has existed in one form or another since the mid 70s.

The role of the group is to "represent, communicate, and champion agency and enterprise needs and to advise the Department of Administration on technical issues concerning information technology in State government."

ITMC also provides a forum for information technology managers. The Council serves to improve the management of the State of Montana's data and information technology resources through discussion of issues, analysis of opportunities, sharing of ideas, and recommending improvements.

MEMBERS

Membership consists of an information technology manager or system coordinator from interested agencies, offices of elected officials, universities, and local government. The Administrator of the Information Services Division of the Department of Administration is also a member. Members are appointed by, and serve at the pleasure of, the Director of the Department of Administration for two-year terms.

The members of ITMC as of July 2000 were:

- Tony Herbert, ISD, Department of Administration
- Hank Voderberg, Department of Administration
- Mike Jacobson, Department of Agriculture
- Ken Kops, Office of the State Auditor
- Gary Wulf, Department of Commerce
- Dan Chelini, Department of Corrections
- George (Rocky) Brown, Department of Environmental Quality
- Barney Benkelman, Department of Fish, Wildlife & Parks
- Steve Bender, Office of the Governor
- Edwina Dale, Office of the Commissioner of Higher Education
- Dawn Brewer, Historical Society
- Dana Corson, Judicial Branch
- To Be Announced, Department of Justice
- David Nagel, Department of Labor and Industry, Chair–Fiscal Year 2000
- Tori Hunthausen, Legislative Audit Division

- Terry Johnson, Legislative Fiscal Division
- Hank Trenk, Legislative Services Division
- Karen Hruska, Lewis & Clark County
- Linda Miller, State Library
- To Be Announced, Department of Commerce, Lottery Division
- Kathy James, Department of Livestock
- Homer Young, Department of Military Affairs
- Carleen Layne, Montana Arts Council
- Bob Auer, Department of Natural Resources & Conservation
- Dulcy Hubbert, Commissioner of Political Practices
- Dan Forbes, Department of Public Health & Human Services, Chair ñ Fiscal Year 2001
- Bob Morris, Office of Public Instruction
- Joel Oelfke, Public Service Commission
- To Be Announced, Department of Revenue
- Lynn Keller, Office of the Secretary of State
- Connie Brooks, State Fund
- Michael Randall, Department of Transportation
- David Marshall, University of Montana
- H. David Todd, Montana State University

2000–2001 Biennium Activities

- Held Strategic Planning Conference, September 1999
- Participated in ITAC's Montana E-Government Conference
- PC Term Contract RFP ñ membership participation in evaluation process
- Strategic Direction for Computer-based Fax
- State Bulletin Board System
- Network Outages Scheduling–approved April 2000
- GIS Metadata Standard–approved April 2000
- Microsoft Office 2000–adopted as state standard April 2000
- Sunset Date for IPX Protocol on SummitNet–adopted June 2000
- Web Server Subcommittee–recommendations approved September 1999
- IP Address Management Subcommittee–recommendations approved January 2000
- Windows 2000 Server Operating System Subcommittee
- Ongoing Updates–SABHRS, Year 2000 Status, NetWare 5 Conversion Project, Information Technology Advisory Council (ITAC) activities, including Montana Online, Executive Board Decisions

SUBCOMMITTEES

Web Server Subcommittee

The ITMC Web Server Committee was formed to assist ISD in developing a web server strategy for state government. The scope of this effort included examining agency needs, researching our existing IT strategies, determining what support is needed by agencies, determining whether a state standard for web server software is required or desirable, and, if so, determine the product(s).

Members:

• Hank Voderberg	Department of Administration
• Mike Jacobson	Department of Agriculture
• Shawn Peterson	Department of Commerce
• Barry Beardslee	Department of Fish, Wildlife & Park
• Tina Marie Wilson	Department of Fish, Wildlife & Park
• Ron Armstrong	Information Services Division
• Brian Dostal	Information Services Division
• Randy Holm	Information Services Division
• Walter North	Information Services Division
• Lynne Pizzini	Information Services Division
• Gary Poepping	Information Services Division
• Hank Trenk	Legislative Services Division
• Steve Meredith	Office of Public Instruction
• Joel Oelfke	Public Service Commission
• Mike Boyer	Department of Revenue
• Steve Tesinsky	Department of Revenue
• Mike Zahn	Department of Revenue
• Ed Benasky	State Fund

The following recommendations were approved in September 1999:

- ISD should provide the following support and services in the following areas: training, operational support, hosting services, development support, needs analysis, and development services.
- A list of supported, but not standard, web server software should be established for server software, development tools and utilities.
- Establish an IIS users group patterned after the Oracle users group (MOPUG), to facilitate peer support and code sharing for the platform. Peer support should be formalized through the individual product users groups and facilitated by ISD.
- ISD, with the assistance of ITMC, should establish technical web page design guidelines

IP Address Management Subcommittee

The subcommittee was created to develop a strategy for the State of Montana in the area of IP address management.

Members:

• Alan Wintersteen	Department of Agriculture, Chairman
• Lisa Westervelt	Department of Commerce
• Rocky Brown	Department of Environmental Quality
• Ron Heilman	Information Services Division
• Audrey Hinman	Information Services Division
• Randy Holm	Information Services Division
• Terry Kramer	Information Services Division
• Tony Noble	Information Services Division
• Steve Noland	Information Services Division
• Dawn Pizzini	Information Services Division
• Gary Poepping	Information Services Division
• Andy Quist	Information Services Division
• Leo Rogge	Information Services Division
• Rick Peaslee	Legislative Services Division
• Dave Johnson	Department of Public Health & Human Services
• Bob Morris	Office of Public Instruction
• Joel Oelfke	Public Service Commision
• Chris Carson	Department of Revenue
• Ed Benasky	State Fund
• Brad Rowell	Department of Transportation

The following recommendations were approved in January 2000:

- ISD will develop a funding strategy and subsequently make a sole source purchase of the Metainfo MetaIP DHCP solution that will integrate with our existing Metainfo DNS. This purchase would have to be funded out of existing agency budgets.
- Request ISD draft policies to allow ISD to manage network traffic.
- ITMC should plan to start a process during the next biennium in order to build the budget submission for the 2003 session to purchase a suite of policy-based IP management tools.

Windows 2000 Server Operating System

Members:

- Randy Holm — Information Services Division
- Dawn Pizzini — Information Services Division
- Lynne Pizzini — Information Services Division
- Dave Nagel — Department of Labor and Industry, Chair
- Hank Trenk — Legislative Services Division
- Dan Forbes — Department of Public Health & Human Services
- Joel Oelfke — Public Service Commision

The subcommittee was directed to study the issues surrounding the use of Windows 2000 Server in the state's Enterprise, including a look at directory services, and make recommendations to ISD for inclusion in the Executive Planning Process (EPP) for the next biennium's budget.

They recommended:

- That Enterprise directory services will be critical for Montana to move into the electronic government arena.
- That ISD and ITAC include funding for the Enterprise to build active directory services and begin the effort for supporting Windows 2000.

SummitNet Executive Council (SEC)

Information Provided by:
Linda Kirkland

http://www.state.mt.us/isd/groups/sec

The SummitNet Executive Council (SEC) was originally created by Governor Racicot in 1995 by Executive Order.

The Order included the following criteria:

- The Council shall provide a governance structure of shared authority within the existing statutory framework regarding management of telecommunication networks.
- The Council shall exercise broad authority for strategic decision-making with regard to SummitNet (the State network). This authority shall include:
  - Policy development
  - Participation (identification of entities allowed to use SummitNet)
  - Financial planning
  - Strategic planning
  - Cost recovery planning and policies
  - Appropriate use policies
  - Development and evaluation of new networking technologies, and
  - Other policy issues related to SummitNet as determined by the Council.
- The membership shall consist of the following: The Director of the Department of Administration, who will chair the council; The Commissioner of Higher Education (or designee); the Superintendent of Public Instruction (or designee); a representative from local government who shall be appointed by the Governor; and three Information Technology Advisory Council (ITAC) members who represent state agencies and who shall be appointed by the Governor.

MEMBERS

- Lois Menzies, Chair, Department of Administration
- Dr. Richard Crofts, Commissioner of Higher Education
- Scott Buswell, Office of Public Instruction
- Mary Bryson, Department of Revenue
- Bill Salisbury, Department of Transportation
- Karen Strege, Montana State Library
- Janet Kelly, Custer County Commissioner

1999–2001 Biennium Activities

- Endorsed contract award to U S WEST Communications for the provision of Statewide Transport Services.
- Endorsed the integration of voice, video and data onto an ATM platform.

Montana Geographic Information Council (MGIC)

Information Provided by:
Stu Kirkpatrick

http://mtgeo.org/mgic

In 1997, Governor Marc Racicot recognized the impact that Geographic Information System (GIS) technology and spatial data in general has on many state agencies, as well as local, federal, and private interests within the State. By Executive Order, he created the Montana Geographic Information Council (MGIC) to provide policy level direction and promote efficient and effective use of resources for matters related to geographic information. That Executive Order was revised and renewed in January 2000. The Council is comprised of representatives from four state and three federal agencies, three local governments, two private sector businesses, one tribal and one university system delegate, and the chairpersons of the Montana Interagency Technical Working Group (ITWG) and the Montana Local Government GIS Coalition (MLGGC).

The Council's stated objectives within the Executive Order are as follows:

- Promote a spirit of cooperation among state, federal, and local agencies, and the private sector in addressing geographic data and information needs and services in Montana.
- Review and establish priorities for statewide geographic information needs and assist in the development of implementation plans.
- Simplify cost sharing and collaborative arrangements to develop and maintain high-priority GIS databases and application programs.
- Promote coordination of programs, policies, technologies, and resources to maximize opportunities and reduce duplication of effort, and to facilitate the documentation, distribution, and exchange of geographic information.
- Ensure the development of consistent policies, standards, and guidelines for geographic information.
- Complement and enhance ongoing coordination efforts of TWG and MLGGC.
- Provide recommendations to the Governor and the legislature, when appropriate, concerning issues related to geographic information in Montana.

The order provides direction for MGIC's roles and activities as described above, and states that it should seek technical advice from the other three GIS groups operating in state–ITWG, MLGGC, and the GIS Users Group. In addition, The Natural Resource Information System (NRIS) at the State Library updates the Council on issues pertaining to the NSDI clearinghouse it houses as well as metadata activities. The Department of Administration's Information Services Division (ISD) provides technical and administrative support for the Council, as provided in the Executive Order.

Any existing group or individual can offer issue-oriented proposals for the Council to consider, providing the proposal complies with existing rules and Council operating procedures. If the Council chooses to accept the issue they either refer it to one of the standing work groups or create a new work group, chaired by a Council member and enlisting help from the technical groups. That group investigates the issue and reports back to the Council with a recommended procedure to solve the problem. Examples of such issue-oriented groups are those on Metadata Standards, Data Transfer Standards, and Data Custodianship. MGIC has four standing committees that emphasize Council priorities. Those groups are GIS Infrastructure and Coordination, Land Record Modernization, Economic Analysis and Cost Benefit, and Legal and Legislative. MGIC meets on a quarterly basis and has the flexibility to call special meetings if necessary.

MEMBERS:

- Lois Menzies, Chair, Department of Administration
- Richard Aspinall, Geographic Information and Analysis Center, Montana State University
- Harold Blattie, Stillwater County
- Stuart Blundell, Integrated GeoScience
- Chris Smith, MT Fish, Wildlife and Parks
- Mary Bryson, Department of Revenue
- Lance Clampitt, USGS National Mapping Division
- CloAnn Villagas, Confederated Salish and Kootenai Tribe
- Dan Mates, Bureau of Land Management
- Jon Sesso, Butte-Silver Bow Planning Department
- Karen Strege, Montana State Library
- Steve Shannon, Montana Power Company
- Pam Case, U.S.D.A. Forest Service
- Rick Breckenridge, MLGGC
- Bob Holliday, ITWG

There is currently one local government vacancy on the Council.

RECENT OR CURRENT ACTIVITIES

- Created and will submit legislation creating a Spatial Data Trust Fund
- Working on recommendations for permanent funding for cadastral data maintenance
- Adopted the Federal Geographic Data Committee's metadata standards

- Working with the Montana Registered Land Surveyors (MARLS) to resolve differences between the surveying and GIS communities
- Revised Executive Order and operating procedures
- Directed Staff to negotiate a Master Purchase Agreement with ESRI (completed) which has been completed
- Endorsed the Data Transfer Directory proposed by the Data Transfer Standards Working Group

SABHRS Executive Council

Information Provided by:
Chuck Virag

AUTHORIZATION STATEMENT

The SABHRS Executive Council (SEC) was created by Lois Menzies, Director of the Department of Administration, effective October 25, 1999 in accordance with the provisions of section 2-15-122, MCA. The SEC shall terminate October 25, 2001, unless otherwise renewed.

PURPOSE

The SABHRS Executive Council provides agencies with an opportunity to collectively provide oversight and guidance to the Department of Administration related to the operation of the Statewide Accounting, Budget, and Human Resource System. The SEC also provides input regarding enterprise solutions to assure business process improvements and change management goals are achieved.

MEMBERSHIP

The SEC consists of 17 members representing the Executive, Judicial, and Legislative Branch agencies. The membership is grouped into six tiers, and the Chair is elected from these member representatives. Agencies within Tiers 1 and 2 appoint a representative from their respective agency. The Director of the Department of Administration appoints a representative from Personnel, Finance, and Information Services. SEC representatives are selected, by the respective agencies, from each of the remaining tiers.

TIER 1

AGENCY	MEMBERS
Administration	3
Personnel	
Finance	
Info. Services	
Governor's Office	1
Legislative Branch	1

TIER 2

AGENCY	MEMBERS
PHHS	1
MDT	1
OPI	1
OCHE	1

TIER 3 Members: 3
Corrections
Justice
Revenue
Labor & Industry
Fish, Wildlife & Parks
State Fund

TIER 4 Members: 3
Environmental Quality
Commerce
DNRC
Military Affairs
State Auditor
Secretary of State

TIER 5 Members: 1
Livestock
Agriculture
Judiciary

TIER 6 Members: 1
Historical Society
Comm. Pol. Practices
Public Service Comm.
State Library
Montana Arts Council

Except for the initial appointments, members serve two-year terms. For the initial appointment, terms are staggered with eight members serving one-year terms and nine members serving two-year terms. After the first year, all members must serve two-year terms.

The following individuals are serving for the term indicated. One-year terms expired October 29, 2000; two-year terms expire October 28, 2001.

Name & Agency	**Tier and Term**
John McEwen, Department of Administration (Personnel)	Tier 1/Administration One-year term
Cathy Muri Department of Administration (Finance)	Tier 1/Administration Two-year term
Tony Herbert Department of Administration (Information Services)	Tier 1/Administration One-year term
Curt Nichols Office of Budget and Program Planning	Tier 1/ Governor's Office Two-year term

Name & Agency	Tier and Term
Terry Johnson Legislative Fiscal Division	Tier 1/Legislative Branch One-year term
Mike Billings Department of Public Health & Human Services	Tier 2/DPHHS Two-year term
Bill Salisbury Department of Transportation	Tier 2/MDT One-year term
Kathy Fabiano Office of Public Instruction	Tier 2/OPI One-year term
Laurie Neils Office of the Commissioner of Higher Education	Tier 2/OCHE Two-year term
Karen Munro Department of Justice	Tier 3 Two-year term
Mary Bryson Department of Revenue	Tier 3 One-year term
Tammy Peterson Department of Labor and Industry	Tier 3 Two-year term
Andy Poole Department of Commerce	Tier 4 Two-year term
Ann Bauchman Department of Natural Resources & Conservation	Tier 4 Two-year term
John Huth State Auditor's Office	Tier 4 One-year term
Frieda Houser Department of Agriculture	Tier 5 One-year term
Sharon McCabe Montana Historical Society	Tier 6 Two-year term

Actions During the 2000–2001 Biennium

- The SEC approved the Department of Administration's plans for upgrading the Finance and Human Resource modules.

  Human Resource upgrade options included 1) partial upgrade to version 7.5 by October 2000; with full implementation by May 2001; 2) full implementation by May 2001; or 3) partial upgrade by May 2001; with full implementation by December 2001. The SEC recommended option #1.

  Finance upgrade options included 1) upgrade to 7.52 by December 2001; 2) upgrade to 7.02 by March 2001; or 3) upgrade to 7.52 by April 2002. The SEC recommended option #2.

- The SEC approved the Department of Administration's plan to seek additional funding of $650,000 for the current biennium to support the upgrade of the Finance and Human Resource modules.

- The SEC surveyed agency staff to identify desired improvements or changes in SABHRS. Provided the results with related recommendations to the SABHRS Support Bureau.

- The SEC reviewed proposed 2002–2003 new budget items and rate recovery options and made related recommendations. New budget items recommended include 1) seven staff and funding for FS and HR upgrade tasks; 2) two staff and funding for FS and HR production support tasks; 3) one staff and funding for archiving and database management tasks; 4) additional funding for consulting services; and 5) request to fully fund PS maintenance contract from the General Fund.

  Rate recovery options for SABHRS costs included using the following bases: A) agency personal services and operating expenses in the base year; B) FTE for HR expenses and agency base personal services and operating expenses for Finance costs; C) FTE counts for base year; D) fund totally from the General Fund. The SEC recommended option C.

9-1-1 Advisory Council

Information Provided by:
Surry Latham

http://www.state.mt.us/isd/groups/9-1-1/

The 9-1-1 Advisory Council was statutorily created by 10-4-102, MCA to participate in the development and implementation of emergency telephone systems using 9-1-1 in Montana. The Council may also review the status of existing 9-1-1 systems in Montana, discuss current issues impacting 9-1-1 service, and make recommendations for the future development of the state's emergency telephone systems.

MEMBERS

- Drew E. Dawson, Chair, Health Systems Bureau, Department of Public Health and Human Services
- James Anderson, Department of Military Affairs, Disaster & Emergency Services
- Ted Benson, Western Wireless
- Al Brockway, Montana Board of Crime Control
- Richard Brumley, Montana EMS Association
- Joe Calnan, Clancy Volunteer Fire Department, Montana Volunteer Firefighters Association
- Geoffrey A. Feiss, General Manager, Montana Telecommunications Association
- Dan Green, US West Communications
- Don Hollister, CenturyTel
- Jane Jelinski, Montana Association of Counties
- Col. Bert Obert, Montana Highway Patrol
- Wilma Puich, Butte/Silverbow DES Coordinator, Association of DES Coordinators
- William McCauley, City of Cut Bank, Montana League of Cities and Towns
- Tim C. Solomon, Hill County Sheriff, Montana Sheriffs and Peace Officers Association
- Michael C. Strand, Executive Vice President, Montana Independent Telecommunications Systems
- Lt. Jim Thomas, Helena Police Department, Association of Public-safety Communications Officials (APCO)
- Chuck Winn, Asst. Chief, Bozeman Fire Department, Montana Fire Chiefs Association

1999–2000 Biennium Activities

- Model RFP developed to assist 9-1-1 center managers to purchase E9-1-1 phone equipment approved
- Addressed the need for additional training for dispatchers and will continue to study this issue
- Agreed to support legislation for mandatory certification
- Endorsed 9-1-1 staff participation in the Billings Wireless E9-1-1 Trial and the E9-1-1 Technology
- Conference in Great Falls

SUBCOMMITTEES

Wireless E9-1-1 Subcommittee

The Wireless E9-1-1 Subcommittee studies issues and makes recommendations related to wireless enhanced 9-1-1 implementation.

Members

- Jim Thomas, Chair, Helena Police Department
- Ted Benson, Western Wireless
- Geoffrey Feiss, Montana Telecommunications Association
- Dan Green, US West Communications
- Don Hollister, CenturyTel
- Surry Latham, Staff, ISD, Department of Administration

Actions

- Develop a plan for wireless E9-1-1 implementation in Montana

Public Safety Communications Council (PSCC)

Information Provided by:
Mike Bloom

In a continuing effort to address pressing Montana public safety communication issues, Governor Marc Racicot renewed the Montana Public Safety Communications Council on May 31, 2000, via Executive Order No. 14-00.

MEMBERS

- Lois Menzies, Chair, Department of Administration
- Elisabeth S. Rice, Montana Power Company, representing other private utilities
- Dennis Taylor, Billings City Administrator, representing local government
- Mike Griffith, Commissioner, Lewis & Clark County, representing local government
- William S. Strizich, U.S. Marshall, representing federal law enforcement
- John Blacker, Administrator, Department of Transportation, representing State government
- Robin Stobe, System Manager, Bureau of Land Management, representing federal government
- Larry Fasbender, Deputy Director, Department of Justice, representing State government
- Bob Jones, Chief, Great Falls Police Department, representing the Montana Chief's of Police
- Bill Slaughter, Sheriff, Gallatin County Sheriff's Department, representing the Montana Sheriff's and Peace Officer's
- Drew Dawson, Chief, Health and Human Services, representing emergency medical services
- William Jameson, Dr., Montana State University, representing citizens at large
- Scott Waldron, Chief Frenchtown Fire Department, representing the Montana Fire Chiefs Association
- Anne Kindness, 9-1-1 Center Manager, Billings, representing state 9-1-1
- Lloyd Jackson, Tribal DES Coordinator, Flathead Nation, representing Montana Tribal community

2000–2001 Predicted Biennium Activities

- Develop a Statewide Interoperability Plan
- Assist state and local government in Plan application and implementation
- Assist state and local government in designing and implementing governance and financial approaches to Interoperability

SUBCOMMITTEES

Technical Subcommittee
The Technical Subcommittee advises the Council on matters of technology affecting public safety communications policy.

Members
- William Jameson, Chair, Montana State University
- Jerry Dupler, Department of Transportation
- Anne Kindness, 9-1-1 Center Manager, Billings
- Randy Martinez, U.S. Marshall Service
- Robin Stobe, Bureau of Land Management
- Clark Walters, Montana Power Company
- Charlie Larsen, Montana Highway Patrol

Governance/Finance Subcommittee
This Subcommittee advises and directs the Council on matters of governance, finance, coordination/cooperation and legislation.

Members
- Lois Menzies, Chair, Department of Administration
- Tony Herbert, ISD, Department of Administration
- Larry Fasbender, Department of Justice
- Elisabeth Rice, Montana Power Company
- John Blacker, Department of Transportation
- Dennis Taylor, City of Helena
- Drew Dawson, Department of Public Health and Human Services
- Mike Griffith, Lewis & Clark County

Appendix

PERSONNEL

FY 2000 IT Positions
Source: OBPP

TITLE	GRADE	FTE	TOTAL FTE
Governor			
Information Systems Support Specialist	16	1.00	
			1.00
Secretary of State			
Program Analyst	14	1.00	
Information Systems Support Specialist	13	1.00	
Information Systems Support Specialist	16	1.00	
			3.00
State Auditor			
Information Systems Operator	10	1.00	
Information Systems Support Specialist	15	2.50	
			3.50
Office of Public Instruction			
Program Analyst	14	1.00	
Program Analyst	15	3.00	
Program Analyst	16	1.00	
Information Systems Support Specialist	13	2.40	
Information Systems Support Specialist	14	1.00	
Information Systems Support Specialist	15	4.04	
Information Systems Support Specialist	16	2.96	
Information Systems Manager	17	1.00	
Information Systems Manager	18	1.00	
Career Executive Assignment	22	2.00	
			19.40
Justice			
Information System Technician	9	1.00	
Information System Technician	10	1.00	
Information System Technician	11	7.00	
Information Systems Operator	12	4.00	
Program Analyst	14	2.00	
Program Analyst	15	5.00	
Program Analyst	16	1.00	
Information Systems Support Specialist	13	5.00	

TITLE	GRADE	FTE	TOTAL FTE
Justice *cont'd*			
Information Systems Support Specialist	15	4.75	
Information Systems Support Specialist	16	5.00	
Information Systems Manager	17	2.00	
Information Systems Manager	19	1.00	
Career Executive Assignment	18	2.00	
			40.75
Board of Crime Control			
Information System Technician	11	1.00	
			1.00
Public Service Commission			
Information Systems Operator	13	1.00	
Information Systems Support Specialist	16	1.00	
			1.00
Higher Education			
Information Systems Support Specialist	13	1.00	
Information Systems Support Specialist	16	1.00	
			2.00
School for Deaf & Blind			
Information Systems Support Specialist	13	0.77	
			0.77
MT State Library			
Program Analyst	15	8.24	
Program Analyst	16	4.18	
Information Systems Support Specialist	14	2.69	
Information Systems Support Specialist	15	4.70	
Information Systems Support Specialist	16	2.00	
Information Systems Support Specialist	17	3.92	
			25.73
Historical Society			
Information System Technician	12	1.00	
			1.00
Fish Wildlife & Parks			
Data Base Technician	11	1.00	
Program Analyst	14	1.30	
Program Analyst	15	6.50	
Program Analyst	16	1.00	
Information Systems Support Specialist	15	2.00	
Information Systems Support Specialist	16	2.00	

TITLE	GRADE	FTE	TOTAL FTE
Fish Wildlife & Parks *cont'd*			
Information Systems Support Specialist	17	1.00	
Career Executive Assignment	18	3.00	
			16.80
Environmental Quality			
Data Base Technician	11	3.05	
Information System Technician	11	1.00	
Information System Technician	12	4.50	
Information Systems Operator	12	1.00	
Program Analyst	14	1.00	
Program Analyst	15	2.00	
Information Systems Support Specialist	13	1.00	
Information Systems Support Specialist	14	7.00	
Information Systems Support Specialist	15	3.75	
Information Systems Support Specialist	16	3.05	
Information Systems Manager	17	2.00	
Information Systems Manager	18	1.00	
Career Executive Assignment	22	1.00	
			28.30
Transportation			
Information System Technician	11	2.00	
Information Systems Operator	11	1.00	
Program Analyst	15	9.65	
Program Analyst	16	4.50	
Information Systems Support Specialist	13	3.00	
Information Systems Support Specialist	14	6.00	
Information Systems Support Specialist	15	9.00	
Information Systems Support Specialist	16	3.00	
Information Systems Manager	17	4.00	
Career Executive Assignment	18	3.00	
Career Executive Assignment	22	1.00	
Telecom System Analyst	15	1.00	
Telecom System Analyst Supervisor	17	1.00	
			48.15
Livestock			
Information System Technician	12	1.00	
Program Analyst	15	1.00	
Information Systems Support Specialist	17	1.00	

TITLE	GRADE	FTE	TOTAL FTE
Livestock *cont'd*			
Career Executive Assignment	18	2.00	
Career Executive Assignment	22	1.00	
			6.00
Natural Resouce & Conservation			
Information System Technician	11	1.00	
Information System Technician	12	1.00	
Information Systems Operator	10	1.00	
Information Systems Operator	11	1.00	
Program Analyst	14	1.84	
Program Analyst	15	3.00	
Information Systems Support Specialist	14	1.00	
Information Systems Support Specialist	15	3.00	
Information Systems Support Specialist	16	1.00	
Information Systems Manager	17	1.00	
Career Executive Assignment	18	3.00	
			17.84
Revenue			
Information System Technician	12	6.00	
Program Analyst	14	2.00	
Program Analyst	15	4.25	
Program Analyst	16	6.00	
Information Systems Support Specialist	14	2.00	
Information Systems Support Specialist	15	9.00	
Information Systems Manager	17	6.00	
Career Executive Assignment	18	5.00	
			40.25
Administration			
Information System Technician	11	3.00	
Information System Technician	12	1.00	
Information Systems Operator	9	5.00	
Information Systems Operator	12	4.00	
Information Systems Operator	14	1.00	
Program Analyst	13	7.00	
Program Analyst	14	5.00	
Program Analyst	15	5.90	
Program Analyst	16	11.00	
Information Systems Support Specialist	13	2.50	
Information Systems Support Specialist	14	11.50	

TITLE	GRADE	FTE	TOTAL FTE
Administration *cont'd*			
Information Systems Support Specialist	15	22.50	
Information Systems Support Specialist	16	42.00	
Information Systems Support Specialist	17	15.00	
Information Systems Manager	17	2.00	
Information Systems Manager	18	5.00	
Information Systems Manager	19	10.00	
Career Executive Assignment	18	1.00	
Career Executive Assignment	22	1.00	
Telecom System Analyst	14	1.00	
Telecom System Analyst	15	3.00	
Telecom System Analyst	16	6.00	
Telecom System Analyst Supervisor	17	1.00	
			166.40
Teachers' Retirement System			
Program Analyst	14	1.00	
Information Systems Support Specialist	17	1.00	
Career Executive Assignment	18	1.00	
			3.00
Agriculture			
Program Analyst	14	4.00	
Information Systems Support Specialist	15	1.00	
Information Systems Support Specialist	16	1.00	
Career Executive Assignment	18	1.00	
			7.00
Corrections			
Data Base Technician	11	4.00	
Information System Technician	11	1.00	
Program Analyst	14	2.00	
Program Analyst	15	1.00	
Information Systems Support Specialist	13	1.00	
Information Systems Support Specialist	14	6.50	
Information Systems Support Specialist	15	2.00	
Information Systems Support Specialist	16	1.00	
Information Systems Support Specialist	17	1.00	
Career Executive Assignment	18	6.50	
Career Executive Assignment	22	3.00	
			25.00

TITLE	GRADE	FTE	TOTAL FTE
Commerce			
Information Systems Operator	9	0.50	
Information System Technician	11	1.00	
Program Analyst	14	3.00	
Program Analyst	15	1.25	
Information Systems Support Specialist	13	1.00	
Information Systems Support Specialist	15	3.00	
Information Systems Support Specialist	16	3.00	
Information Systems Manager	17	1.00	
Career Executive Assignment	22	1.00	
			14.25
Labor & Industry			
Information System Technician	11	1.00	
Information System Technician	12	1.00	
Program Analyst	13	1.00	
Program Analyst	14	5.00	
Program Analyst	15	12.00	
Information Systems Support Specialist	13	3.00	
Information Systems Support Specialist	14	10.00	
Information Systems Support Specialist	15	3.00	
Information Systems Support Specialist	16	4.00	
Information Systems Manager	17	3.00	
Career Executive Assignment	18	12.00	
Information Systems Operator	10	1.00	
Information Systems Operator	11	1.00	
			57.00
Military Affairs			
Career Executive Assignment	18	4.01	
			4.01
Health & Human Services			
Information Systems Operator	8	1.00	
Data Base Technician	11	1.00	
Information System Technician	10	1.00	
Information System Technician	11	4.00	
Information System Technician	12	7.50	
Program Analyst	13	6.00	
Program Analyst	14	1.00	
Program Analyst	15	1.00	
Program Analyst	16	5.00	

TITLE	GRADE	FTE	TOTAL FTE
Health & Human Services *cont'd*			
Information Systems Support Specialist	14	7.00	
Information Systems Support Specialist	15	19.50	
Information Systems Support Specialist	16	6.00	
Information Systems Support Specialist	17	2.00	
Information Systems Manager	17	4.00	
Information Systems Manager	18	1.00	
Career Executive Assignment	18	16.00	
Career Executive Assignment	22	6.00	
			87.00
		Total	**648.15**

Information Technology Class Descriptions

- Information System Technician
  Provides technical support on information systems by using procedures, methods, and techniques.

- Program Analyst
  Performs work analyzing user needs and developing application programs using the ability to program in a general purpose programming language.

- Information Systems Support Specialist
  Performs work involving technical support on information systems by using principles of computer science, business administration, mathematics, electrical engineering or related fields.

- Information Systems Manager
  Performs work managing the data processing functions for an agency.

- Career Executive Assignment
  Performs work involving the management, administration, and direction of major agency functions.

- Telecom System Analyst
  Performs work identifying the need and developing the specification for the installation or modification of telecommunications equipment.

- Information Systems Operator
  Performs work involving operation of large scale, multi-programmed computer systems.

- Data Base Technician
  Performs clerical and complex technical work in maintaining a major inter-agency, statewide computer data system.

SOFTWARE

Desktop

- **Microsoft Office License Count:**

License Description Source/	Educational	OEM Provided *	Agency Purchases	ISD Purchased	TOTALS
Office 97	161	1,039	636	1,170	3,006
Office 2000	0	837	63	5,460	6,360
TOTALS	161	1,876	699	6,630	9,366

* OEM is Original Equipment Manufacturer. Microsoft Office is part of the bundled software package provided when the State procures PCs.

- **Virus scanning licenses:**

Coverage	Qty	Product Name	Product Vendor
E-mail	10,500	Antigen	Sybari Software
Desktop Suite	10,000	VirusScan Security Suite	Network Associates/McAfee
Network Servers	530	NetShield Security Suite	Network Associates/McAfee

Exchange server licenses—9
Exchange mailbox licenses—10,145
Exchange user mailboxes—9,909

Agency Application Systems

Information technology is not limited to computers. In fact, without software written to accomplish certain tasks, the computers are simply expensive paperweights. The State of Montana has a vast inventory of computer systems. The challenges of Y2K caused us to conduct a detailed inventory of systems running on State computers. The actual number of systems is always changing as old, antiquated systems are replaced with newer, more productive systems and new systems are developed to meet new requirements of State agencies. Below is a summary table of the most recent inventory of IT systems. These systems can range from the very large like SABHRS to small, PC based databases. The inventory divides them according to the platform or computer they run on. In addition to this table, readers can see the entire database of State systems from their own PC by going to **http://www.state.mt.us/isd/planning/**. If you would like to see this data and do not have access to the Internet, please contact ISD at 444-2700 and we will arrange to get the data to you.

State IT Systems

as of October 1, 2000

AGENCY/DIVISION	HARDWARE PLATFORM PC	MID-TIER	MAINFRAME	TOTAL
Administration				
ISD		5	6	11
MSB	2			2
Mgmt Support			1	1
Printing	3			3
PERD	1		2	3
TRS		5		5
Subtotal	**6**	**10**	**9**	**25**
Agriculture				
Subtotal	**19**	**1**	**0**	**20**
Commissioner of Political Practices				
Subtotal	**1**	**1**		
Commissioner of Higher Education				
Subtotal	**1**	**0**	**0**	**1**
Commerce				
Building Codes		4		4
Board of Housing		8		8
Board of Investments		1		1
CEIC		1		1
Finance		2		2
HAB	2			2
Horse Racing		1		1
Local Gov't	2			2
Lottery		2		2
Management		2		2
Occupational Licensing		2		2
Travel	1			1
Weights & Measures		1		1
Subtotal	**5**	**24**	**0**	**29**
Corrections				
AS 400		6		6
ISB Chief	8			8
Subtotal	**8**	**6**	**0**	**14**
Environmental Quality				
CSD		1		1
DIR	4	1		5
ENF	1	1		2
ITB	3	1		4

AGENCY/DIVISION	HARDWARE PLATFORM PC	MID-TIER	MAINFRAME	TOTAL
Environmental Quality *cont'd*				
P&C	2			2
P&C/AWM	12	2	1	15
P&C/CSB	1	3		4
P&C/EMB		1		1
P&C/IEM		1		1
P&C/WPB	4	1	1	6
PPA/MDM	5	1	1	7
PPA/PPB	2			2
PPA/RPP	4			4
PPA/TFA	3		1	4
REM/MWC	3			3
REM/TSB	8			8
Subtotal	**52**	**13**	**4**	**69**
Fish, Wildlife & Parks				
BAS Support			1	1
FWP HQ	1	2	3	6
Region 3		1		1
Subtotal	**1**	**3**	**4**	**8**
Historical Society				
Administration	1			1
Historical Preservation	3			3
Library	1			1
Museum	2			2
Publications	1			1
Subtotal	**8**	**0**	**0**	**8**
Judiciary				
Court Administration	3			3
Office	3			3
Supreme Court Clerk	2			2
Subtotal	**8**	**0**	**0**	8
Justice				
BCC	5			5
CSPD	10	4	2	16
FSD	5			5
GCD	1			1
LESD	3			3
MHP	10			10
MVD	4		2	6
Subtotal	**38**	**4**	**4**	**46**
Labor & Industry				
ERD	12	2		14
JSD-JTPA	1		1	2

AGENCY/DIVISION	HARDWARE PLATFORM PC	MID-TIER	MAINFRAME	TOTAL
Labor & Industry *cont'd*				
JSD-PROG	5		7	12
JSD-RA	10		1	11
Centralized Services	5	1		6
UI	3	3	3	9
Subtotal	**36**	**6**	**12**	**54**
Legislative Branch				
LAD	1	1		2
LFD	1		2	3
LSD	9	2	3	14
Subtotal	**11**	**3**	**5**	**19**
Livestock				
Subtotal	**38**	**0**	**1**	**39**
Montana Arts Council				
Subtotal	**1**	**0**	**0**	**1**
Natural Resources				
Subtotal	**7**	**0**	**4**	**11**
Public Instruction				
Subtotal	**54**	**0**	**0**	**54**
Health and Human Services				
Subtotal	**27**	**18**	**17**	**62**
Public Service Commission				
Subtotal	**13**	**0**	**0**	**13**
Revenue				
Subtotal	**13**	**7**	**6**	**26**
Secretary of State				
Subtotal	**3**	**0**	**0**	**3**
State Auditor				
Subtotal	**5**	**0**	**0**	**5**
State Fund				
Subtotal	**0**	**1**	**6**	**7**
State Library				
Subtotal	**0**	**5**	**0**	**5**
Transportation				
Subtotal	**47**	**11**	**17**	**75**
Total System Count	**402**	**112**	**89**	**603**

State Supported Software

PC and LAN Software Supported by ISD

CATEGORY	PRODUCT NAME	OPERATING SYSTEM	VERSION	COMMENTS
Backup	ARCServeIT	NetWare, NT	6.6	
Communication	Extra! Personal Client	Win 9x, NT, 2000	6.4	Site License purchased by ISD Versions back to 6.1 also supported. Includes IP stack for Internet access
	Xtalk	Win 9x, 2000	3.0	
Database	Oracle 7 Server Oracle 8 Server	NetWare, Win NT	7.3.4 8.x	Site License purchased by ISD
	Personal Oracle Enterprise	Win 9x, NT	8.x	Site License purchased by ISD
	Personal Oracle Lite	Win 9x, NT	23.6	
	Oracle Pro*C	Win 9x, NT	2.2	
	Oracle Pro*Cobol	Win 9x, NT	1.8	
	Developer 2000	Win 9x, NT	1.3.2 2.1 6.0	Includes Forms, Reports, Graphics Site License purchased by ISD
	Designer 2000	Win 9x, NT	1.3.2 2.1.2	Site License purchased by ISD
	Discoverer 2000	Win 9x, NT	3.1	
	SQL Plus	Win 9x, NT	3.3 8.0	
	Enterprise Manager	Win 9x, NT	1.6	
	SQL *NET TCP/IP	Win 9x, NT	2.3.4 8.x	Site License purchased by ISD
	Lotus Approach	Win 9x, 2000	97	For personal or small database applications developed by end-users Use Access or Oracle for other applications
	Microsoft Access	Win 9x, NT, 2000	97, 2000	For small to medium database applications Use Oracle for larger agency or enterprise applications. Suggested sunset date for Access 97 is June 2001.
	Microsoft Visual Basic	Win 9x, NT, 2000	5.0 6.0	VBA also
Desktop Mgmnt	ZENWorks	Win 9x, 2000	2.0	Provided under State's MLA with Novell

CATEGORY	PRODUCT NAME	OPERATING SYSTEM	VERSION	COMMENTS
E-mail/Calendar	Microsoft Outlook (Exchange)	Win 9x, NT, 2000	98, 2000	Site License purchased by ISD. Suggested sunset date for Outlook 98 is June 2001.
Graphics	CorelDraw	Win 9x, 2000	7,8	Limited support
	Microsoft PowerPoint	Win 9x, NT, 2000	97, 2000	Site License purchased by ISD. Suggested sunset date for PowerPoint 97 is June 2001.
Internet	LAN Workplace	DOS	5.0	Agencies purchase through ISD's master license agreement with Novell. Interim standard for DOS users, replaced by Extra! Personal Client for Windows users.
	Microsoft Internet Explorer	Win 9x, NT, 2000	4.01 5.01	
	Microsoft FrontPage	Win 9x, NT, 2000	2000	
Online Documentation and Help	Adobe Acrobat Reader	Win 9x, NT, 2000	4.0	Free from Adobe
	Assist/Vision	DOS	2.0	Site License purchased by ISD
	IBM Library Reader	DOS, 2000, Win 3.x	3.0	Site License purchased by ISD
	Oracle Book runtime	Win 3.x, 9x, NT	2.2.0	Site License purchased by ISD
Operating System (desktop)	Windows 95		Rev. A, B, C	Phasing out Win 95 as PCs are replaced. For 486/66 or Pentiums with 16M memory.
	Windows 98		1st & 2nd edition	Phasing out Win 98 as PCs are replaced. Recommend 98 for new pc purchases if not ready for 2000 and need a 9x version.
	Windows NT Workstation		4.0	Phasing out NT4 as PCs are replaced. Use where specifically needed (caution: laptops, older 16-bit app's).
	Windows 2000 Professional			Next generation desktop OS adopted by ITMC 4/5/2000. Recommended for new pc purchases (as soon as your IT staff is trained and has tested it).
Operating Systems (server)	NetWare		4.11, 5.x	Recommend 4.x moving to 5.x, Master License Agreement purchased by ISD

CATEGORY	PRODUCT NAME	OPERATING SYSTEM	VERSION	COMMENTS
Remote Access Server OS	Citrix MetaFrame	Win 2000	1.8	Replacing WinFrame product. Monthly charge for use of ISD facility.
	Microsoft's Terminal Server	Win 2000	4.0	Requires Terminal Server Client Access License (CAL) for every terminal connecting to the server
	Novell's Internet Access Server		4.1	Formerly NetWare Connect. Monthly charge for use of ISD facility
	WinFrame	DOS, Win 3.x, 9x, NT, 2000	1.7	Being replaced by MetaFrame. Monthly charge for use of ISD facility
Report Distribution	DocumentDirect	Win 3.x, 9x, NT	2.1	Site License purchased by ISD Sunset October 15, 2000
		Win 9x, NT, 2000	2.2	Site License purchased by ISD
	DocuAnalyzer	Win 9x, NT, 2000	4.1	Site License purchased by ISD
Spreadsheet	Microsoft Excel	Win 9x, NT, 2000	97, 2000	Site License purchased by ISD, Suggested sunset date for Excel 97 is June 2001
Statewide Accounting	Legacy Solutions MBARS	Win 9x, NT, 2000	2000	Site License purchased by ISD.
Budgeting & Human Resources System (SABHRS)	PeopleSoft HRMS	Win 9x, NT, 2000	6	Site License purchased by ISD. New release tentatively scheduled for implementation Oct 27, 2000.
	PeopleSoft Financials	Win 9x, NT, 2000	6	Site License purchased by ISD.
Statistics	SAS	Win 9x, NT, 2000	6.12	Site License purchased by ISD, one-time initial license fee recharged to agency
Virus Protection	Network Associates Virus Scan	Win 9x, NT, 2000	4.0.2 4.0.3	Site License purchased by ISD Scans desktop PCs
	Network Associates Netshield for NetWare	NetWare	4.0.2	Site Licenses purchased by ISD Scans NetWare file servers
	Network Associates Netshield for NT	NT	4.0.2	Site Licenses purchased by ISD Scans NT file servers
	Sybari Antigen	NT	2000081101	Site License purchased by ISD Scans Internet e-mail and Exchange databases
Word Processing	Microsoft Word	Win 9x, NT, 2000	97, 2000	Site License purchased by ISD, Suggested sunset date for Word 97 is June 2001

Mainframe Software Supported by ISD

CATEGORY	PRODUCT NAME
Backup	HARBOR, FDR
CICS	AbendAid/FX, Assist/GT, Automon, BMS/GT, CICS/ESA, CICS-CEMT, CICS-Message, CICS-News, CICS-Windows, CICS Transaction Server for OS/390, Finalist, Text DBMS, XPEDITER
Communication	VTAM, Direct Connect, TCP/IP, SSP, NCP, HCF
Database	IDMS, Oracle
Graphics	GDDM, OGL/370
Internet	Websphere Application Server
Job Scheduling	Control-M, Control-R, ECS Internet portal
Monitors	AF/Operator, AF/Remote, CMF, Newview, Omegamon II for CICS, Omegamon for MVS, Omegamon for VTAM, Omegaview
Operating System	OS/390: JES2, TSO/E, ISPF and SDSF, Unix System Service
Print Services	PSF/MVS, VPS/VMCF, OS/390 Print Server
Programming Languages, Compilers and Usage Tools	High Level Assembler, COBOL for MVS, COBOL Report Writer Precompiler, VS FORTRAN, C/C++, Panvalet, Visual Gen, LE/MVS, PL/I
Reference Information	MVS/QuickRef, Book Manager
Report Distribution	INFOPAC-RDS
Security	ACF2
Session Managers	CL/SUPERSESSION
Tape/DASD Management	CA-1, DMS/OS, DF/SMS, IXFP, Snapshot, CA-90's, 0AM, CopyCat
Utilities	DYL 260, SYNCSORT, PC File Transfer, SAS, COMPAREX, LISTCAT Plus, MXG, XPEDITER, TIC TOC

HARDWARE

PC Term Contract Units and Dollar Volume
Fiscal Year Totals

	IBM # PCs	IBM Dollar Volume	Digital/ Compaq # PCs	Digital/ Compaq Dollar Volume	Dell # PCs	Dell Dollar Volume	Total PCs	Total $ Volume
FY 93*	189	$ 964 314	219	$ 836,171	239	$ 889,378	647	$ 2,689,863
FY 94	412	1,234,197	458	2,187,195	507	2,158,575	1,377	5,579,967
FY 95	831	1,451,497	655	2,710,495	788	3,727,821	2,274	7,889,813
FY 96	1,052	3,034,637	535	1,931,574	1,219	2,607,501	2,806	7,573,712
FY 97	446	1,231,486	1,101	3,657,254	984	2,595,142	2,531	7,483,882
FY 98	1,155	2,278,481	696	1,645,492	1,718	5,549,584	3,569	9,473,557
FY 99**	729	1,580,624	457	1,085,681	2,457	6,132,946	3,643	8,799,251
FY00***	106	370,915	–	189,408	2,971	7,287,168	3,077	7,847,491
Totals	4,920	$12,146,151	4,121	$14,243,270	10,883	$30,948,115	19,924	$57,337,536
Avg/Yr	676	$1,597,405	557	$1,915,300	1,521	$4,294,105	2,754	$7,806,810

(Average is per full FY–Average of FY 94–FY 00)

* Jan 93–Jun 93

** Digital numbers through Dec 98

***Compaq numbers starting Jan 00. Compaq dollar volume comes from file servers and related products.

Agency Mid-tier Inventory:

AGENCY	EQUIPMENT TYPE	APPS/SYSTEMS SERVED	OPERATING SYSTEM	PRODUCTION OR TEST SYSTEM
Administration	N/A			
Agriculture	N/A			
Arts Council	N/A			
State Auditor	N/A			
BPE	N/A			
CHE–OCHE	DEC Alpha 2100	MS Exchange e-mail	Windows NT 4.0	Production
CHE–MSU	DEC Alpha 4100	Banner Administrative System	Unix	Test
Bozeman	DEC Alpha 8400	Banner Administrative System	Unix	Production
	DEC Alpha 4100	Banner Administrative System	Unix	Production
	DECstation 500	Mail server	Unix	Production
	DECstation 500	Web server	Unix	Production
	Compaq ES40	MUS Data Warehouse Project	Unix	Production
CHE–UofM Missoula	(2) DEC Alpha 8200 5/625	Host UM's SCT Banner admin. infor. systems applications	OpenVMS	Production (administrative support)
	(3) Compaq/DEC Alpha 2100 4/275	Host UM-Missoula's Unix and MS Exchange e-mail systems	Compaq/Digital Tru64 Unix and Microsoft NT 4.0 server	Production (campus-wide support)
	(3) Compaq/DEC Alpha 1000A	Host UM-Missoula's WWW activities, Banner Web access front-end, and dept. MS Exchange e-mail system	Microsoft NT 4.0 server	Production (campus-wide support)
	Compaq/DEC Alpha 3000/500	Host instructional (primarily student) computing activities	Compaq/Digital Tru64 Unix	Production (instruction)
	(2) Compaq/DEC Alpha 3000/400	Host UM-Missoula network and production system operational interfaces	Compaq/Digital Tru64 Unix	Production (internal activities)
	(multiple) Compaq/DEC Alphastations	Host various UM-Missoula networkcore services activities	Compaq/Digital Tru64 Unix	Production
	Compaq/DEC DECstation 5000/240	Host UM-Missoula network services activities (listserv)	DEC Ultrix	Production
	Compaq/DEC DECstation 5000/250	Host UM-Missoula network services activities (DNS)	DEC Ultrix	Production

AGENCY	EQUIPMENT TYPE	APPS/SYSTEMS SERVED	OPERATING SYSTEM	PRODUCTION OR TEST SYSTEM
CHE–UofM Missoula *Cont'd*	(2) HP 9000	Host UM-Missoula's Dynix library system and GrizCard (campus one-card) activities	HPUX	Production
	Compaq ES40	Host MUS Data Warehouse Also mid-tier systems in various research grants and projects across campus including a DEC Alpha 4100 and numerous IBM RS6000 workstations.	Unix	Production
Consumer Counsel	N/A			
CPP	N/A			
DEQ	(2) DELL 4400	(1) Internet web server & (1) Oracle database repository "Enterprise"	Windows NT & Novell NetWare	Production
	DELL 4200	Research & Developmentserver	Novell	Development
DNRC	N/A			
DOC	IBM AS400 Model 620	Central computer for most dept. systems, including Adult Corrections Information System (ACIS) & Inmate Banking & Commissary system Also will have new PRO-Files system.	OS400 V4R3	Production
DoComm	DEC Alpha 2100	Databases for all programs but Lottery & Board of Investments	Digital Unix	Production & Development
	DEC MicroVax MV3185	Mortgage accounting system (ALICE)	OpenVMS	Production
	DEC MicroVax	Mortgage accounting system (ALICE)	OpenVMS	Production
DOJ	RS/6000	Criminal Justice Information Network (CJIN)	AIX 4.3 (Unix)	Production
	RS/6000	Criminal History Records System (CHRS)	AIX 4.3 (Unix)	Production
DoLI	N/A			
DoLiv	N/A			
DoMA	N/A			
DOR	IBM AS/400 Model 720	Property Tax (CAMAS), Liquor Order Entry System	OS/400	Production
DOT	Intel Server	Winframe terminal server	Windows NT	Production
	Intel Server	Oracle Development & Test	Windows NT	Development
	Intel Server	Oracle Report Server	Windows NT	Production
	Intel Server	Oracle Application Server	Windows NT	Production

AGENCY	EQUIPMENT TYPE	APPS/SYSTEMS SERVED	OPERATING SYSTEM	PRODUCTION OR TEST SYSTEM
DOT *cont'd*	Intel Server	Outlook Web Client	Windows NT	Production
	Intel Server	DOT Internet Server	Windows NT	Production
	Intel Server	Primary Domain Controller	Windows NT	Production
	Intel Server	Print Server	Windows NT	Production
	Intel Server	Microsoft SMS Server	Windows NT	Production
	Intel Server	Commercial Vehicle Information Systems Network	Windows NT	Production
	Intel Server	AASHTO–Bid Estimating System	Windows NT	Production
	Intel Server	Contract Management	Windows NT	Production
	Intel Server	Library Software	Windows NT	Production
	Intel Server	Oracle Traffic Analysis System	Windows NT	Development
	Intel Server	RAS Server	Windows NT	Production
	Intel Server	ESRI Spatial Database	Windows NT	Production
	DEC Alpha	Disk Storage Server	OpenVMS	Production
	DEC Alpha	Client File Servers and CADD Oracle Server	OpenVMS	Production
	DEC Alpha AXP 4000	Production Oracle	OpenVMS	Production
	DEC Alpha AXP 4000	Test Oracle	OpenVMS	Development
	DEC Alpha		OpenVMS	Production
	DEC Alpha		OpenVMS	Production
DPHHS	RS/6000 7026-H70	Medstat Advantage Suite—Decision Support for analyzing reporting Medicaid data.	AIX 4.3.2	Production
	RS/6000 7025-F50	IDEA Data Warehouse, holds county health dept. summary data.	AIX 4.3.2	Testing (under development–will become production)
	RS/6000 7025-F50	Oracle OLTP Production Database Online Transaction Processing database for the agency. Applications include: AWACS, ISERV, FCS and CACFP.	AIX 4.3.2	Production
	RS/6000 7013-J50	Oracle Data Warehouse for general data storage for the agency, including: SABHRS General Ledger Detail, Warrants Written, Medicaid Eligibility, CDS & Position Control.	AIX 4.3.2	Production

AGENCY	EQUIPMENT TYPE	APPS/SYSTEMS SERVED	OPERATING SYSTEM	PRODUCTION OR TEST SYSTEM
DPHHS *cont'd*	RS/6000 7013-59H	Medicaid Paid Claims Data Warehouse / Backup Server. Oracle development platform for the Paid Claims reporting system. Tivoli Storage Manager backup server.	AIX 4.3.2	Testing (Paid Claims)– Production (Backup Server)
	RS/6000 7025-F50	Web Development / Testing / Redundant Backup. Web dev, testing software installs and upgrades and providing redundant hardware in case of failure of other critical RS/6000s.	AIX 4.3.2	Testing
	RS/6000 7025-F50	Production Web Server for agency's static web pages and Virtual Pavilion. Also provides secure web pages and Oracle web server.	AIX 4.3.2	Production
	WANG VS6230	Case Management used by Disability Determination Section	WANG	Production
FWP	DEC VAX	File and network server	OpenVMS	Bozeman office (R3) –file server
	Dell PowerEdge	Sportsman's database, Harvest Surveys applications	Windows NT 4.0	Bozeman - Productionw/ test partitions
	Dell PowerEdge	Nonresident License Drawings, Hunter Ed System, Alternate and Surplus Licensing, Smith River Drawings, NoticeToAppear system, Lands Inventory, Land and Water Conservation Fund, Legal File Tracking, Upland Game Bird, other miscellaneous internal systems.	Windows NT 4.0	Helena– Production w/ test partitions
	RS 6000	ALS development at Wesco	IBM AIX	Development & Test
GOV	N/A			
Historical Society	DELL PowerEdge 2300	Agency Netware Server	Novell Netware	Production
Judiciary	N/A			
LEG	N/A			
OPI	N/A			
PSC	N/A			
Sec. of State	DELL Power Edge	Oracle Server currently housing the Central Voter File and Electronic ARM.	Novell Netware	Production & Test

AGENCY	EQUIPMENT TYPE	APPS/SYSTEMS SERVED	OPERATING SYSTEM	PRODUCTION OR TEST SYSTEM
State Fund	IBM S70 (RS/6000)	PowerComp Production Database	AIX	Production Server
	IBM H70 (RS/6000)	ADSM Server	AIX	Production Server
	IBM H50 (RS/6000)	FileNet Image Services Server	AIX	Production Server
	IBM H70 (RS/6000)	Data Warehouse Server	AIX	Production Server
	IBM H50 (RS/6000)	PowerComp Development Server	AIX	Test Server
	IBM 58H (RS/6000)	FileNet Development Server	AIX	Test Server
State Library	Information unavailable at time of publication.			
TRS	Digital Alpha 2100	Teacher's Retirement System Pension Administration (BENESYS)	OpenVMS	Production (using Cognos Powerhouse database suite & tools)

Total agency mid-tier computers: 77
Total ISD mid-tier computers: 35
Total statewide mid-tier computers: 112

Mainframe Supported Hardware

Mainframe

- One IBM 9672-R26
- 4096 MB Processor Storage
- 217 MIPS (million instructions per second) computing power

DASD Configuration

- 9393 T82–RVA (Ramac Virtual Array), 420 GB (256 Volumes) with eight ESCON Channel Paths, Controller with 3072 MB Cache
- 9393 T82–RVA (Ramac Virtual Array), 500 GB (256 Volumes) with eight ESCON Channel Paths, Controller with 3072 MB Cache
- 9393 X82-RVA (Ramac Virtual Array), 420 GB (512 Volume) with eight ESCON Channel Paths, Control with 3584 MB Cache

Magnetic Tape

- Four 3490-E cartridge drives
- Two 3480 cartridge drives
- Two 3420 reel drives
- 3494 Tape Library, ATL with 15 3590 MAGSTAR cartridge drives; VTS with 128 virtual 3490 drives and 244 GB Cache

Printers

- One IBM 4245 Impact (2,000 lines per minute)
- Three Xerox 4890 spot Color Laser (96 pages per minute)
- Two IBM 3835 Laser Continuous Forms

Terminals

- 1,100 dumb terminals
- 7,000 smart terminals (PCs with emulation)

CONTRACTED SERVICES

MIS Services Term Contract Dollar Volume

Total Dollar Amounts	FY 99	FY 00
Carrera-Maximus	$62,000	$259,000
Computer Consulting Corp.	$1,688,000	$2,504,000
Gold Systems	$365,000	$497,000
Front Desk Software	$37,000	$57,000
Information Engineering	$831,000	$1,790,000
KPMG Consulting	$2,697,000	$2,767,000
PSINet Consulting	$0	$368,000
TATA Consulting Services	$0	$410,000
TRW	$2,858,000	$4,001,000
Wesco	$139,150	N/A
Total for Fiscal Year	$8,677,150	$12,653,000

Agency Contracted Services

AGENCY	PROJECT NAME	CONTRACTOR	DURATION OF CONTRACT	TOTAL VALUE
Agriculture	Wheat and Barley committee website http://wbc.agr.state.mt.us	Michael Weaver	Sept. 1999–Feb. 2000	$4,440
Arts Council	Database development	Computersmith	Two phases, first one is underway.	$3,500 incl. training of two staff.
State Auditor	N/A			
BPE	N/A			
CHE–OCHE	N/A			
CHE–MSU Bozeman	Internet 2	Pacific/Northwest Gigapop	FY 2001	$50,000
	Commodity Internet	Verio	FY 2001	$160,000
CHE–UofM Missoula	Do not contract directly for services of the type provided through the state MIS Services contract.			
Consumer Counsel	N/A			
CPP	N/A			
DEQ	Underground Storage Tank Internet data	State Library–NRIS	5/2/00–10/31/00	$19,000
	GIS Support GTF Coalfields	State Library–NRIS	6/23/99–9/22/00	$20,000
	Streamside Tailings	State Library–NRIS	9/1/97–9/30/00	$40,000
	Ecosystem Restoration Web site	MSU	1/1/00–12/31/01	$2,000
	Internet Web Page Development	State Library–NRIS	7/01/00–6/30/01	$35,000
	Map Objects Indus Energy & Minerals	State Library–NRIS	7/01/99–6/30/01	$60,000
	Public Water Supply GIS for Public	State Library–NRIS	07/01/98–06/30/01	$84,000
	Total Maximum Daily Loads	State Library–NRIS	7/01/99–4/30/01	$44,700
	Mine Waste Cleanup GIS	State Library–NRIS	7/01/98–9/22/00	$155,000
	Air Internet Data Acquisition	State Library–NRIS	continuing status	$5,000

AGENCY	PROJECT NAME	CONTRACTOR	DURATION OF CONTRACT	TOTAL VALUE
DEQ *cont'd*	Environet	State Library–NRIS	continuing status	$10,000
	STORET Web Interface	State Library–NRIS	continuing status	$20,000
DNRC	N/A			
DOA	Claims Database	TRW	July 1999–continuing	$100,000 est.
		Jeanean Spencer	July 1998–continuing (maint.)	$30,000 est.
DOC	PRO-Files	Information Impact	4-11-00–5-31 00	$40,000
DoComm	N/A			
DOJ	CJIS	CPI/Datamaxx	By Fiscal Year	$347,841/yr
CJIS		TRW	By Month	$317,096 in FY00; varies per contract per month
CJIS		WIN	By Fiscal Year	$267,000/yr
DoLI	JobLINC Operating System (integrated technology for the full workforce system)	Science Applications International Corporation (SAIC)	Phase I, Sept.99–Febr. 00; Phase II, Feb. 00–June 01	$749,080
DoLiv	Brands System–Maint.	Key Computer Consultants, individual contractor is Carol Robocker-Andersen	Contract is an annual ongoing contract for miscellaneous projects as needed	Total aggregate Misc. amount of contract not to exceed $10,000.00
DoMA	N/A			
DOR	CAMA support	Cole-Layer-Trumble Corporation (CLT)	1999–2000	$192,000
	Tele-file application support	Revenue Solutions	1999–2000	$160,000
	Document Processing Station maintenance software/hardware	Wausau	1/1/2000–12/31/2000	$21,109
	Predictive Dialer–software maintenance	Mosiax	ongoing	$19,428
	Cardiff Fax Scanner–software maintenance	Wausau	1/1/2000–12/31/2000	$5,855

AGENCY	PROJECT NAME	CONTRACTOR	DURATION OF CONTRACT	TOTAL VALUE
DOT	MOTRS (MOntana Tax and Revenue System)	Lockheed Martin IMS	Aug. 94–Aug 00	$1,823,321 over life of contract
	MDT Strategic Planning	WESCO	FY00, FY01	$144,500
	Sign Management System	WESCO	FY00	$29,240
	STARS-MEARS (Motor Carrier Information)	WESCO	FY00, FY01	$112,680
	Summer Road Reporting System	WESCO	FY00, FY01	$76,104
DPHHS	LEVY Case Management software support for Disability Determination	ILEVY & Assoc.	3/1/2000–2/28/2001	FY 2000/2001– $ 55,450
	On-site Information Systems Consulting and Technical Assistance	Westcon Consulting Services	6/30/1995–6/30/2002	FY 2000/2001– $ 189,675
	AS/400 and Oracle Conversion On-site Consulting Services Support	Software Innovations	7/1/2000–6/30/2001	FY 2000/2001– $ 53,065
	AREV and Oracle Conversion Programming Support	Gold Systems	10/1/1997–9/30/2002	FY 2000/2001– $ 305,673
	MMIS (Facility Management)	Consultec Inc.	01/01/1996–06/30/2006	FY 2000/2001– $7,506,906
	TEAMS/MACCS (Facility Management)	TRW Inc.	06/30/1996–10/31/2003	FY 2000/2001– $7,810,987
	SEARCHS: (Facility Management)	TRW Inc.	03/02/98–10/31/2004	FY 2000/2001– $3,112,721
	CAPS: (Facility Management)	TRW Inc.	07/01/99–06/30/2006	FY 2000/2001– $2,918,662
FWP	Automated Licensing System (ALS)	MCI Worldcom (Wesco subcontracting)	June 1999–March 2006 (includes potential extensions)	Approximately $9 million (includes potential extensions)
GOV	N/A			
Historical Society	N/A			
Judiciary	N/A			
LEG	BANNERS Audit assistance	TBD	Possible FY01–TBD	$128,000 est.

AGENCY	PROJECT NAME	CONTRACTOR	DURATION OF CONTRACT	TOTAL VALUE
OPI	School Food Service manage ment of the National School Lunch, Breakfast, Afterschool Snack programs, and the Special Milk programs via the Internet during FY2000	EasySoft	FY2000 Maint. contract through FY2001	A system used in other states was modified by EasySoft to meet Montana's needs for $90,000 + $10,000 maintenance contract.
	SABHRS support–Federal grant accounting analysis	CBSI	July 1, 99–March 31, 00	$4000
PSC	N/A			
Sec. of State	OPPEN/UCC	NIC, USA	Ends 04/21/01	$700,000
State Fund	Data Warehouse	Scoble Group	June 2001	$100,000
	Integration of WMS applications	Antech Consulting	October 2000	$104,000
State Library	Information unavailable at publication.			
TRS	Teachers' Retirement System Pension Administration server–hardware and software maintenance	Connecting Point (formerly Sento)	May 1, 00–April 30, 01	$7,800
	Teachers' Retirement System Imaging Server (software maintenance)	FileNET	July 1, 00–June 30, 01	$13,000
	Teachers' Retirement System PeopleSoft Pension Administration modules (software development, test, and integration "go live" planned for January 1, 2001)	KPMG	April 1999–January 2001	$3,905,435

AGENCY LANS

Total number of nodes on LANs 6/30/00: 9,834
Total number of nodes on LANs predicted for 6/30/01: 10,253
Total number of nodes on LANs predicted for 6/30/02: 10,713
Total number of nodes on LANs predicted for 6/30/03: 11,039

Agency approach to support for their LANs

Agency	Description of How Agency Supports LAN
Administration	The Network Support Unit consists of 2.5 F.T.E. who support all of Dept of Admin users with the exception of ISD. Agencies include: Personnel, Architecture and Engineering, General Services, State Tax Appeal Board, Publication and Graphics, Purchasing, Management Support, Risk Management and Tort Defense, Appellate Defenders Office, Director's Office and Property and Supply Bureau
Agriculture	The Department of Agriculture supports a total of 6 LANs located throughout the state. We have 3 IT staff members that develop, maintain, install and support the department's network and its users. The Department is also participating in the Distributed IT Resources Demonstration Project with ISD. The purpose of the project is for agencies to share IT resources in state offices outside of Helena.
Arts Council	The Montana Arts Council contracts with the Department of Administration/ Information Services Division for their LAN Administration Services.
State Auditor	Our staff includes 3 part-time and 1 full-time to provide support for all computer needs, from user support to application development.
BPE	BPE relies on the CHE for LAN support.
CHE-OCHE	The OCHE local area network is supported by 1.0 FTE, Information Systems Support Specialist located within the OCHE.
CHE-MSU Bozeman	The campus area network and wide area network are supported by the Network Systems and Operations staff within the Information Technology Center at Montana State University.
CHE-UofM Missoula	LAN administration and support of local LAN services is generally provided by IT specialists employed by the various departments, with assistance and high-level support provided by the central CIS network support staff. At least two dozen such LANs exist on the UM-Missoula campus.
Consumer Counsel	The Consumer Counsel contracts with the Department of Administration/ Information Services Division for their LAN Administration Services.
CPP	This is a small agency. We are connected to the state backbone and contract with ISD for all of our LAN administration needs.
DEQ	Local Area Networks in Billings, Kalispell, and two locations in Helena are administered centrally from Helena by means of the Wide Area Network. We utilize remote console and remote control of workstations to update and solve problems. Both Bureaus maintain these sites.

DNRC DNRC has LANs at 27 offices. The large offices in Helena and Missoula have dedicated IT support staff on-site that support the networks. IT staff in Helena and one dedicated field office support person supports networks in the smaller offices.

DOC The Department of Corrections has a Network support unit that is part of the Automation and Program Services Bureau and consists of seven full-time staff including 1 Unit Supervisor, 5 Network Technicians, and 1 Help Desk Technician. This Team supports over 560 workstations, 19 servers, and phone services for almost 1100 department employees.

DoComm The department has two network administrators in Management Services Division (MSD) who directly support the LANs used by all users at 1424 9th, Board of Housing (BOH) and Banking & Financial Division at 836 Front Street, and Building Codes and POL Divisions, which are in the process of moving to the Federal building. The Lottery and Board of Investments have their own LAN administrators, but receive occasional support from MSD. POL and the Section 8 program within BOH have computer staff who provide low-level support on LANs in conjunction with their primary IT duties.

DOJ The Montana Department of Justice has approximately 1000 desktop computers, evenly divided between those that are and are not connected to a local area network (LAN). Approximately 500 users operate on 12 LANs: six are in Helena, two in Missoula, two in Great Falls, one in Billings, and one in Deer Lodge. Two of the Helena LANs are in agencies attached to the Department of Justice (the Natural Resources Damage Program and Montana Board of Crime Control).

In FY00, DOJ reduced the number of servers and separate LANs so there is no longer more than one primary LAN server at a given location. Secondary servers are still in use at several locations for simple print services, software deployment, on-line backup and administrative duties. Two additional, dedicated Novell Netware servers support the Departmentís accident and driver records imaging systems.

Primary LAN support is provided by four Information Systems Support Specialists in the Departmentís central IT division (Justice Information Systems Division) and two in its Motor Vehicle Division. These individuals also provide support for 500 additional non-LAN workstations (Criminal Justice Information Network, Title & Registration System, and Driver Control System users). An additional seven staff across the department provide some degree of LAN support. Three of these are IT workers and four are administrative or other professional staff—all with other primary responsibilities.

For the 2001 Biennium, the Department consolidated the LAN equipment replacement budgets of its nine primary divisions into a single responsibility center (RC 2923). The two LANs for the agencies attached to the Department are supported as are other DOJ divisions — by the Department's personal services funds–while their operational costs are paid through their separate budgets.

DoLI The Department concentrates support of its many Local Area Networks (LANs) using internal personnel. In limited instances and under the direction of internal personnel, vendor contracts may be used to complete some network tasks. Resources from Information Services Division (ISD) are also used when directed by ISD.

DoLiv We support 2 LANs, one in Helena, one in Bozeman. Both are supported by internal staff, one primary (Information Systems Support Specialist) and one secondary (Programmer/Analyst).

DoMA In house support for end users and LAN administration and contracted LAN support with ISD.

DOR The Department maintains both a LAN and a WAN for its statewide offices. The department has technical staff that supports workstations, servers, software, etc., which are attached to the state network. The department contracts with TRW to provide LAN support for the Federal Building, where the project team for POINTS is physically located.

DOT MDT utilizes IT human resources for both the media layer (physical layer) and for support of the protocols (TCP/IP, data network analysis, etc.). We have many LANs today. Helena headquarters is our single largest LAN. In addition to the main Helena LAN, we have 11 district and area offices, 25 MCS weigh stations, 10 field maintenance section houses, Helena aeronautics division office, Helena MDT Prospector office site and 10 field construction trailers, all of which have a LAN. As needs evolve we expect over time all of our maintenance section houses (110) will be deployed with LAN technology. Another 75 construction trailers will likely deploy LAN technology as well. ISB has three FTE that support the protocols (software level) and directory level administration (printer queues, data traffic analysis, problem resolutions, file shares, access privileges, etc.) of LAN management.

For the physical support, a couple maintenance personnel are able to support Helena based needs. About 8 Communicationís bureau personnel, which are distributed throughout Montana, support the physical aspects of the remote LANs. It should be noted that the activities involved for support of the LANs do not account for many of the other duties these employees perform. For LAN to WAN issues, our staffs work close with ISD personnel, for both the planning and operational network support issues and needs.

DPHHS DPHHS Network and Communications Bureau (NCB) manages 100 LANs (Local Area Networks) and peripherals (3500 microcomputers, 300 network printers) located in DPHHS offices statewide. Staff provide a wide variety of support including installation, user set-up, security and on-going maintenance (telephone support and onsite). These LANs host DPHHS applications including electronic timesheets, AWACS (Automated Warrant and Contract

System), the WIC program, the document generation for the CAPS (Child and Adult Protective Services) system and for SEARCHS system (the Child Support System). LAN maintenance (troubleshooting when a problem occurs, user maintenance and application updates) are done using the wide area network (Summitnet) and communication protocols (Novell management software or IPX (Internetwork packet exchange)) that allow remote communication to attach to a LAN to make changes. Updates are also made using communications software and Summitnet to attach to the LAN. All information on the LAN is backed up (copied) to tape on a weekly basis and daily backups are made of the files that have changed.

LAN support may require staff to travel to the location. An example is server hardware failure. A back-up server is installed and information is transferred from the failing server (if available) or from the back-up tapes. DPHHS IS staff are located in Helena, Kalispell, Warm Springs, and Billings in order to minimize downtime and provide prompt service for our users.
Other LAN related duties provided by NCB include coordination of telecommunications for DPHHS offices and institutions, data security services, and management of a microcomputer training program for DPHHS staff.

FWP FWP employees within the Administrations & Finance Division administer, design, deploy, support and maintain LANs within the agency.

GOV The Governor's Office has one network administrator to support the LAN.

Historical Society The Society contracts with ISD for LAN support.

Judiciary Staff in the Administrative Office of the Courts centrally support the Judicial Branch LANs.

LEG The Branch uses Novell NetWare as its Local Area Network software. We have one file server with about 180 workstations/printers connected to it. During session, that figure goes up to about 250. We have a support staff of 3 FTE, 1.5 Contractors and 1 college intern. We use Windows 95 on the desktop and Novell Zen Works to distribute applications out to the desktop.
The Legislative Branch has a very controlled desktop environment. There is policy in place to prevent staff from installing any software on the PC. When ever new software is proposed, we always check to see if existing software or state or Branch standard software can meet the need, and if other parts of the Branch can use the same or similar software. This way we keep our software inventory to a minimum and follow state and Branch standards as closely as possible.

The Branch also has an organizational structure to conduct short term planning for implementation of new LAN technology. A group consisting of user representatives from every area of the Branch as well as the central

called the Technical Implementation Planning Group. Long term planning for the LAN is incorporated into the Branch overall IT planning process. A sub stantial part of the budget is to maintain the operational status of network, i.e. to keep up with current releases and to replace older equipment.

OPI OPI has a network staff of four positions. One administrator, two technicians and one help desk position. This staff provides technical support to the Office's 160+ computers in two buildings and to 900 + Montana schools running OPI operated computer applications. OPI converted from OS/2 to Novell in the last biennium. Currently OPI supports both the Novell v5 and Windows NT/2000 operating systems. OPI works in conjunction with the Information Systems Division to coordinate activities where necessary. OPI currently meets state standards on all hardware and software and no compatibility issues exist with other state agencies. The network staff is responsible for all hardware and applications support.

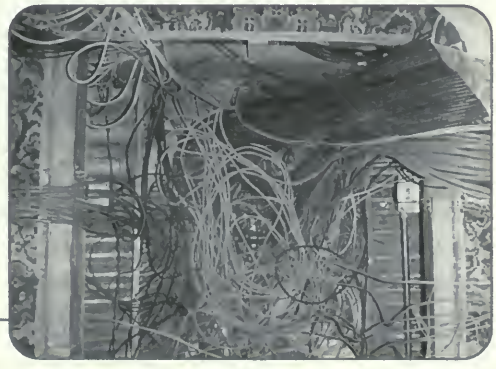
PSC Our LAN is supported by internal PSC staff.

Sec. of State The office LAN is supported by office IT staff (Network Administrator, Assistant Network Administrator, and Application Developer).

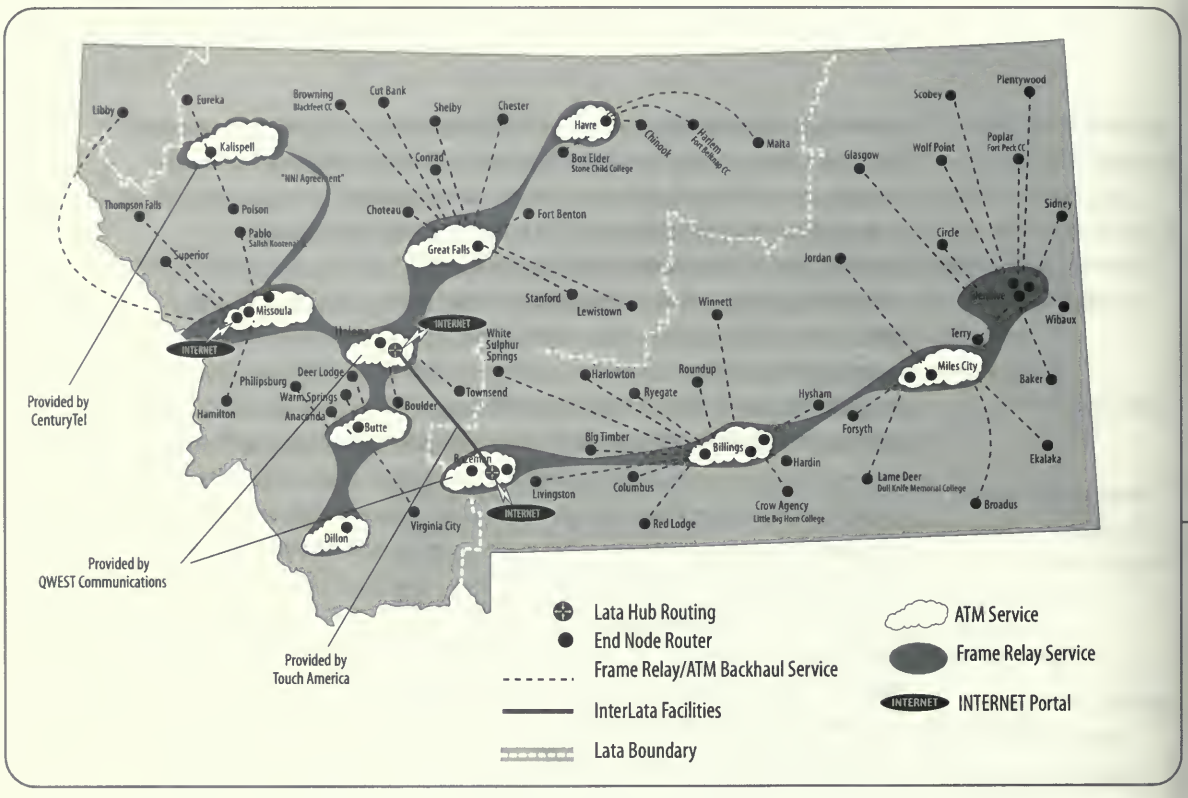
State Fund The State Fund LAN is supported in-house. All upgrades, maintenance, and support is handled by in-house staff.

State Library The Montana State Library technologically supports the LANs it utilizes by (1) employing a systems administrator; (2) training additional staff as appropriate to back up the systems administrator; (3) making use of the services provide to us by the ISD help desk.

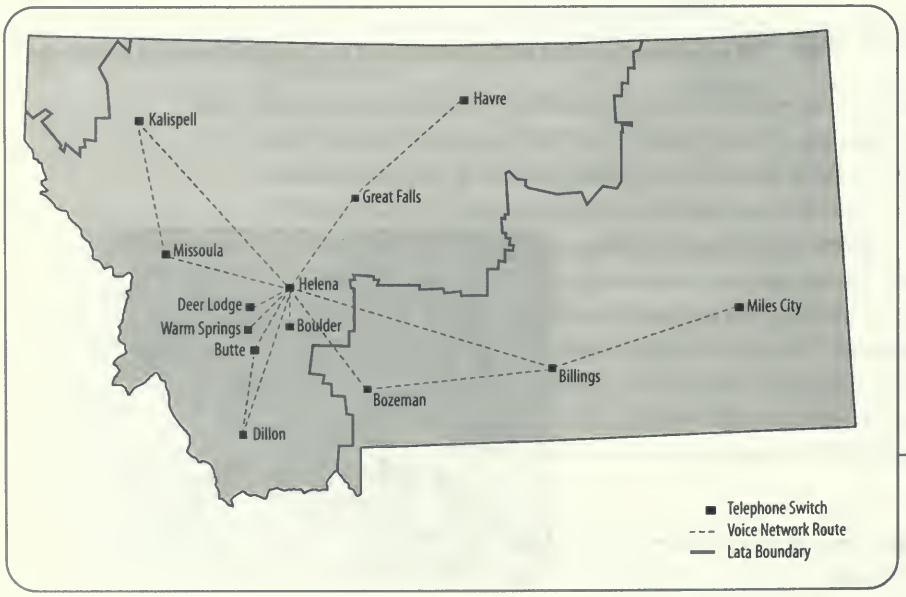
TRS TRS supports their LAN with internal staff and troubleshooting assistance from ISD.



SummitNet II



Current Voice Network



GLOSSARY

AARP	Automated Accounting and Reporting Project (Dept. of Justice)
ACH	Automated Clearing House
ACIS	Adult Correctional Information System (Dept. of Corrections)
ACTS	Agent Commission Tracking System (State Fund)
ADIOS	Automated Data Integration Operating System (Dept. of Public Health and Human Services)
AFIS	Automated Fingerprint Identification System (Dept. of Justice & Corrections)
ALI	Automatic Location Identification
ALS	Automated Licensing System (Dept. of Fish, Wildlife & Parks)
AMPS	Automated Medical Payment System (State Fund)
ANI	Automatic Number Identification
ARM	Administrative Rules of Montana
AS/400	IBM minicomputer system
asset management	Maintaining owned items. Often connected with the financial aspect of ownership.
ATM	Asynchronous Transfer Mode
backbone	The top level in a hierarchical network.
bandwidth	The difference between the highest and lowest frequencies of a transmission channel.
BBS	Electronic Bulletin Board System
BIOS	Basic Input/Output System. On PCs, controls the first stage of the bootstrap (boot-up) process.
BIS	Benefits Information System (Dept. of Public Health and Human Services)
BPR	Business Process Reengineering
cadastral	A survey, map, or plan on a large scale so as to represent the exact positions and dimensions of objects and estates. Cadastral Mapping Project Land owner database project (Dept. of Administration)
CAMAS	Computer Assisted Mass Appraisal System (Dept. of Administration)
CAT	Case Tracking System (Dept. of Labor & Industry)
CD	*(also CD-ROM or CD ROM)* Compact Disk Read Only Memory
CDS	Central Database System (Dept. of Public Health and Human Services)
CEIS	Census and Economic Information Center (Dept. of Commerce)
Certificate of authority	Sometimes used in place of the term "digital certificates." A code that can be attached to an electronically transmitted message that uniquely identifies the sender.
CICS	Customer Information Control System (IBM)
CJIN	Criminal Justice Information Network (Dept. of Justice)

CODECs	Any technology for compressing and decompressing data. Can be implemented in software, hardware, or a combination of both.
Criminal History Records System	Dept. of Justice system
CSBG	Community Services Block Grant (Dept. of Public Health and Human Services)
data warehouse	System for storing, retrieving, and managing large amounts of data.
DBMS	Database Management Systems
DEQ	Department of Environmental Quality
digital cash	Virtual cash possibly stored in a card such as a Smart Card.
disaster recovery plan	Organized plan for the restoration of computer systems and networks in the eventuality of a disaster.
Discovering Montana	State of Montana's official web site. Internet front door.
distance learning	Learning that takes place via electronic media linking instructors and students who are not together in a classroom.
DLI	Department of Labor and Industry
DNRC	Department of Natural Resources and Conservation
DOA	Department of Administration
DOARS system	Using electronic means in courtroom evidence presentation. (Judicial Branch)
document imaging and workflow system	Scanning paper documents into electronic format and the movement of these documents through an organization.
document management	Tracking of documents throughout an organization. Often related to archiving and indexing of documents.
DOR	Department of Revenue
DOT	Department of Transportation
DPHHS	Department of Public Health and Human Services
EBC	Electronic Birth Certificate (Dept. of Public Health and Human Services)
EBT	Electronic Benefits Transfer
EC	Electronic Commerce: Conducting of business communication and transactions over networks and through computers.
e-commerce	Electronic commerce/EC
EDI	Electronic Data Interchange
EDMIS	Electronic Document Management and Imaging System
EFT	Electronic Funds Transfer
Electronic filing	Electronic submission of documents or other information.
electronic signature	Sometimes used in place of the term "digital signature". Extra data appended to a message which identifies and authenticates the sender and message

data using encryption.

e-mail *(also E-mail)* Electronic Mail

encryption Any procedure used in cryptography to encode data in order to prevent any but the intended recipient from reading that data.

EPP Executive Planning Process

fiber-optic A technology that uses glass (or plastic) threads (fibers) to transmit data.

firewall Virtual "wall" utilizing security software to protect networked machines from unauthorized access by individuals or other outside sources.

FTP File Transfer Protocol

FWP Dept. of Fish, Wildlife and Parks

FY Fiscal Year

GIS Geographic Information System: System for capturing, storing, manipulating, analyzing, and displaying data related to positions on the Earth's surface.

GIS Cadastral Mapping Connecting of land ownership data to map/locational data.

GIS clearinghouse Collection of GIS data and maps open to the public.

GroupWare Software that can be used by a group of people who are working on the same information but may be distributed in space.

hackers A person who explores the details of programmable systems and how to stretch their capabilities.

hardware The physical, touchable, material parts of a computer or other system.

HEAT Help Desk Expert Automation Tool (Dept. of Public Health and Human Services)

IBM International Business Machines

IDEA Integrated Data for Evaluation and Assessment (Dept. of Public Health and Human Services)

IDMS Integrated Data Management System

imaging Scanning paper documents into graphical or electronic format.

Internet Collection of large, interconnected, backbone computer networks spanning the globe.

Intranet Any network which provides similar services within an organization to those provided by the Internet outside it but which is not necessarily connected to the Internet.

ISD Information Services Division (Dept. of Administration)

IT Information technology

IT enterprise In the instance of this publication, the IT community within the State of Montana government.

IT sponsorship The backing of IT initiatives.

ITAC Information Technology Advisory Council

ITMG Information Technology Managers' Group

ITS Intelligent Transportation Systems (Dept. of Transportation)

IVR	Interactive Voice Response
JCMS	Judicial Case Management System (Judicial Branch)
LAD SBAS system	Interface system utilized by the Legislative Audit Division to extract and analyze SBAS data.
LAN	Local Area Network: A computer network that spans a relatively small area.
LAWS	Legislative Automated Workflow System (Legislative Branch)
LIMS	Laboratory Information Management System (Dept. of Justice)
LiveScan System	Automated fingerprinting system (Dept. of Corrections & Justice)
MAEFAIRS	Montana Automated Education, Financial and Information Reporting System (Office of Public Instruction)
mainframe	Large and fast central computer often serving hundreds of users and requiring a special cooling system.
MBARS	Montana Budget Analysis and Reporting System (Dept. of Administration)
MCA	Montana Code Annotated
MCJISP	Montana Criminal Justice Information Services Project (Dept. of Justice)
MDT	Montana Department of Transportation
MEPS	Montana Eligibility and Payment System (Dept. of Public Health and Human Services)
META	Metamorphosis Project (Dept. of Revenue)
METNET	Montana Educational Telecommunications Network (Office of Public Instruction)
MGIC	Montana Geographic Information Council
MIBS	Montana Integrated Budget System (Legislative Branch & the Governor's Office)
microprocessor chip	Central processing unit of a microcomputer.
mid-tier/midrange computing	Utilizing network servers and microcomputers to accomplish distributed processing.
MIS	Management Information System: A computer system designed to provide management personnel with up-to-date information on an organization's performance.
MISTICS	Montana Integrated System To Improve Customer Service (Dept. of Labor & Industry)
MLGGC	Montana Local Government GIS Coalition
MMIS	Medicaid Management Information System (Dept. of Public Health and Human Services)
Montana Online	Former Montana State Government web site, now Discovering Montana
MPSCC	Montana Public Safety Communications Council
MSU	Montana State University

MT PRRIME	Montana Project to Reengineer the Revenue and Information Management Environment-now SABHRS (Dept. of Administration)
MVS	Multiple Virtual Storage, mainframe operating system which superceded OS/390.
NCIC	National Crime Information Center 2000: FBI national effort to improve criminal justice information systems.
NDS	NetWare Directory Services: Provides a logical tree-structure view of all resources on the network so that users can access them without knowing where they're physically located.
Network Operating System	An operating system which includes software to communicate with other computers via a network.
Network Security	Any effort made to protect a computer network from danger or risk of loss making the network safe from errors, intruders, and other threats.
NMG	NetWare Managers' Group
Novell NetWare	State standard client/server network operating system.
NRIS	Natural Resources Information System (State Library)
NSDI	National Spatial Data Infrastructure
OBPP	Office of Budget and Program Planning (Governor's Budget Office)
OCR	Optical Character Recognition: Reading text from paper and translating the images into a form that computers can manipulate.
One-Stop Business Licensing Project	Dept. of Revenue
Online	Used herein to refer to information or a system accessible via the Internet.
operating system	Core program that a computer system runs.
OPI	Office of Public Instruction
OPPEN	Office Public/Private Enterprise Network (Secretary of State)
Oracle	Relational database system that is becoming a mainstay in the State's database efforts.
OS	Operating system
P/P/P	*(also PPP)* Payroll/Personnel/Position Control (Dept. of Administration)
PAALS	Policy Audit, Accounting, and Loss control System (State Fund)
PAMS	Property Accountability Management System (Dept. of Administration)
PARIS	Purchasing Accounting Reporting Information System (Dept. of Administration)
PBX	Private Branch Exchange: A private telephone network used within an enterprise.
PC	Personal Computer
PeopleSoft	Information technology corporation whose software is used to build the SABHRS systems.

POINTS	Process Oriented and Integrated System (Dept. of Revenue)
POL	Professional & Occupational Licensing (Dept. of Commerce)
PSAP	Public Safety Answering Point
PSC	Montana Public Service Commission
PSCTF	Public Safety Communications Task Force
RDBMS	Relational Database Management System
remote dialup access	Ability to access a remote computer with another computer and modem.
RF	radio frequency
RFP	Request for Proposal
RIS	Roadway Imaging System (Dept. of Transportation)
RWIS	Remote Weather Information System (Dept. of Transportation)
SABHRS	State Automated Budget and Human Resources System (Dept. of Administation)
SBAS	Statewide Budgeting and Accounting System (Dept. of Administration)
scanning	Creating an image that a computer can manipulate of a document, picture, or other element by passing it through an optical scanner.
SEC	SummitNet Executive Council
smart card	A small electronic device about the size of a credit card that contains electronic memory, and possibly an embedded integrated circuit (IC).
	software Computer program.
SQL	Structured Query Language: Standardized programming language for requesting information from a database.
STARS	State Truck Activities Reporting System (Dept. of Transportation)
STAWRS	Simplified Tax And Wage Reporting System (Dept. of Revenue)
SummitNet	State and Universities of Montana Multi-Protocol Network
TCP/IP	Transmission Control Protocol/Internet Protocol
telecommunications	Refers to all types of data transmission, from voice to video.
telefiling	Filing information via a telephone system.
TIS	Transportation Information System (Dept. of Transportation)
TWG	Montana Interagency Technical Working Group
U of M	University of Montana
UCC	Uniform Commercial Code
UPS	Uninterruptible Power Supply
VHSP	Virtual Human Services pavilion (Dept. of Public Health and Human Services)
video conferencing	Conducting a conference between two or more participants at different sites by using computer networks to transmit audio and video data.
VINE	Victim Identification and Notification Everyday (Dept. of Corrections)
VMS	Virtual Memory System: A minicomputer and workstation operating system.

VPN Virtual Private Network: Network constructed by using public wires to connect nodes. Uses encryption and other security mechanisms to ensure that only authorized users access the network and that the data cannot be intercepted.

WAN Wide Area Network: A computer network that spans a relatively large geographical area.

WCAP Workers' Compensation Automated Project (Dept. of Labor & Industry)

Web *(also web and WWW)* World Wide Web

web site Location on the Internet.

WIC Women, Infants, and Children (Dept. of Public Health and Human Services)

WIM Weigh-In-Motion (Dept. of Transportation)

workflow Document/information routing within an organization.

WTI Western Transportation Institute

WWW *(also Web and web)* World Wide Web: A system of Internet servers that support specially formatted documents.

Y2K *(Year 2000)* Problem as the result of a decades-old computer programming convention of storing only the last two digits of the four-digit year in computer systems.

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